SN 5389

10/08/98

OCT 28 1998

In Reply Refer To: MS 5232

Mr. E. J. Ralph
Texas Gas Transmission Corporation
Post Office Box 20008
Owensboro, Kentucky 42304

Dear Mr. Ralph:

ABN

Pursuant to 30 CFR 250.1000(b), the relinquishment of the right-of-way grant associated with the following pipeline is hereby accepted effective September 3, 1998:

Pipeline Segment No.	Size (inches)	Length (feet)	Service	From	To
5389 (Right-of-Way OCS-G 4027)	8 5/8	41,314	Gas	Platform A Block 296 Ship Shoal Area Lease OCS-G 1535	A 30-inch SSTI Block 320 Eugene Island Area Unleased

Your letter dated August 27, 1998, requests approval to permanently abandon in place approximately 41,314 feet (7.82 miles) of 8 5/8-inch pipeline designated as Segment No. 5389, and to relinquish in its entirety, Right-of-Way Grant OCS-G 4027 associated therewith.

Pursuant to 30 CFR 250.104(b), approval is hereby granted to abandon this pipeline, and in accordance with 30 CFR 250.159(c), the requirement that the pipeline be removed is hereby waived. However, in the future, should it be determined that this abandoned pipeline constitutes a hazard to navigation or commercial fishing operations or unduly interferes with the other uses of the Outer Continental Shelf, Texas Gas Transmission Corporation shall be required to remove it.

Sincerely,

(Org.Sgd.) J. R. Hennessey

Donald C. Howard
Regional Supervisor
Field Operations

bcc: 1502-01 Segment No. 5389, ROW OCS-G 4027 (MS 5232)
1502-01 ROW OCS-G 4027 (Microfilm) (MS 5033)

JGuidry:amm:9/24/98:Texas.389

on mf
11/2/98

JG

Williams

GAS PIPELINE
Texas Gas
P O Box 20008
3800 Fredenca St
Owensboro, Kentucky 42304
502/926-8686

August 27, 1998

Mr. Don Howard
Minerals Management Service
Gulf of Mexico OCS Region
1201 Elmwood Park Boulevard
New Orleans, Louisiana 70123-2394

Dear Mr. Howard:

Application to Relinquish Pipeline
Right of Way Grant OCS-G 4027
Segment No. 5389
Block 296A Ship Shoal to Block 320 Eugene Island Area

Pursuant to the authority granted by 30 CFR Part 250.150(b), Texas Gas Transmission Corporation requests to abandon in place 41,314 feet of 8" pipeline and relinquish the right-of-way in its entirety located in the Ship Shoal Area, Offshore Louisiana.

Please find enclosed three (3) executed Abandonment of Pipeline Service forms and the applicable drawings for the aforementioned pipelines.

Should you have any questions concerning the above, please contact Ms. Tina H. Baker at (502) 688-6497.

Thank you for your assistance.

Very truly yours,

E Jack Ralph

E. Jack Ralph
Vice President

EJR:thb

Enclosures

Application to Relinquish Pipeline Right-of-way Grant

Texas Gas Transmission Corporation, as owner and holder, requests approval to abandon and relinquish in its entirety pipeline right-of-way **OCS-G 4027** granted to Texas Gas Transmission Corporation by the United States of America Department of the Interior through the Bureau of Land Management, dated June 5, 1979, and described as follows, to wit:

Segment 5389

> Right of way 200 feet in width for the construction, maintenance, and operation of a 8-5/8 inch natural gas pipeline, 7.83 miles in length, from Kerr-McGee Corporation's Platform "A" in Block 296, Ship Shoal Area, South Addition, crossing a portion of same; thence crossing portions of Blocks 323, 324, 321, and 320, all in Eugene Island Area, South Addition, to a 16" underwater side valve on the Tennessee Gas-Texas Eastern-Texas Gas jointly owned 30" pipeline in Block 320, Eugene Island Area, South Addition, Gulf of Mexico.

Texas Gas Transmission Corporation requests abandonment and relinquishment in accordance with 30 CFR Part 250.150(b). The procedures that were used in taking the pipeline out of service in March 1988 are attached to and included as part of this request. After abandonment the pipeline will not constitute an unreasonable hazard to navigation, fishing, or the marine environment. The pipeline has been purged to remove materials, if released, that could be harmful to the marine environment. Since Kerr-McGee Corporation has depleted production at Platform "A" in Block 296, the riser at platform "A" Block 296 has been removed and the end of the pipeline that remains underwater beneath the mudline has been plugged according to the attached procedures. At Block 320, the pipeline has been disconnected near the 16" side valve and was plugged (below the mudline) according to the attached procedures. Sketches are attached to and included as part of this request showing the location (in X-Y coordinates) of the proposed section of pipeline to be approved for Abandonment.

Executed this 27th day of August, 1998.

ATTEST: **TEXAS GAS TRANSMISSION CORPORATION**

Vivian C. Poole
Assistant Secretary

By: D. Jack Ralph
Vice President

Attachments

Proposed Block 296A Ship Shoal – Block 320 Eugene Island
8" Pipeline Abandonment Procedure
Segment 5389 (OCS-G 4027)

To the best of our knowledge, the following abandonment procedures were performed in March 1988.

Block 296A Ship Shoal – Block 320 Eugene Island 8" Pipeline Abandonment

1. Inserted pig in line on platform at Block 296 Ship Shoal. Filled line with seawater and 348 gallons of OFC C-2005 Water Soluble Corrosion Inhibitor, 105 gallons of OFC B-648 Biocide, and 348 gallons of OFC OS-939 Oxygen Scavenger. All water and pipeline fluids ahead of the pig went through the 2" bypass (around the 8" valve) near the 16" side valve and was collected in the 30" pipeline at Block 320 Eugene Island.

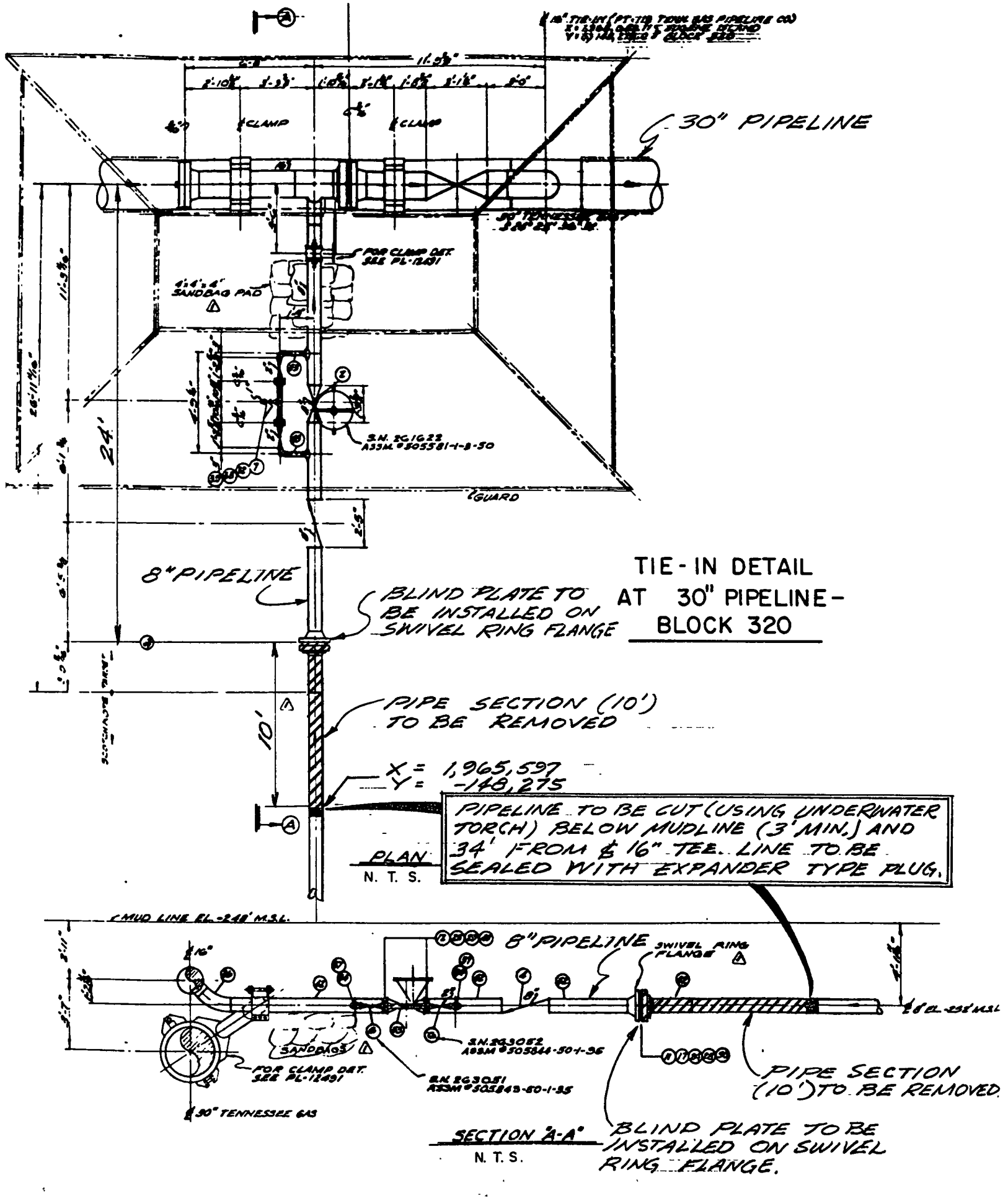
2. At Block 296 Ship Shoal, with divers, cut (using underwater torch) a short pup out of 8" pipeline 50' from base of platform. Installed expander type plug (to be furnished by diver) in pipeline and checked to verify that end of pipe remains 3'+ below mudline. Riser and underdeck piping was left on the platform leg and removed when the platform was salvaged by Kerr-McGee.

3. At Block 320 Eugene Island, with divers, cut (using underwater torch) 8" pipeline approximately 34' upstream from centerline of 16" tee (i.e. 10' upstream of swivel ring flange). Unbolted pipe at swivel ring flange, removed the 10' section of pipe, and installed blind plate to remaining swivel ring flange. Inserted expander type plug (to be furnished by diver) in line going back to Block 296 Ship Shoal. Checked to verify that ends of pipe remain 3'+ below mudline. Locked all side valves in a closed position.

4. Job completed.

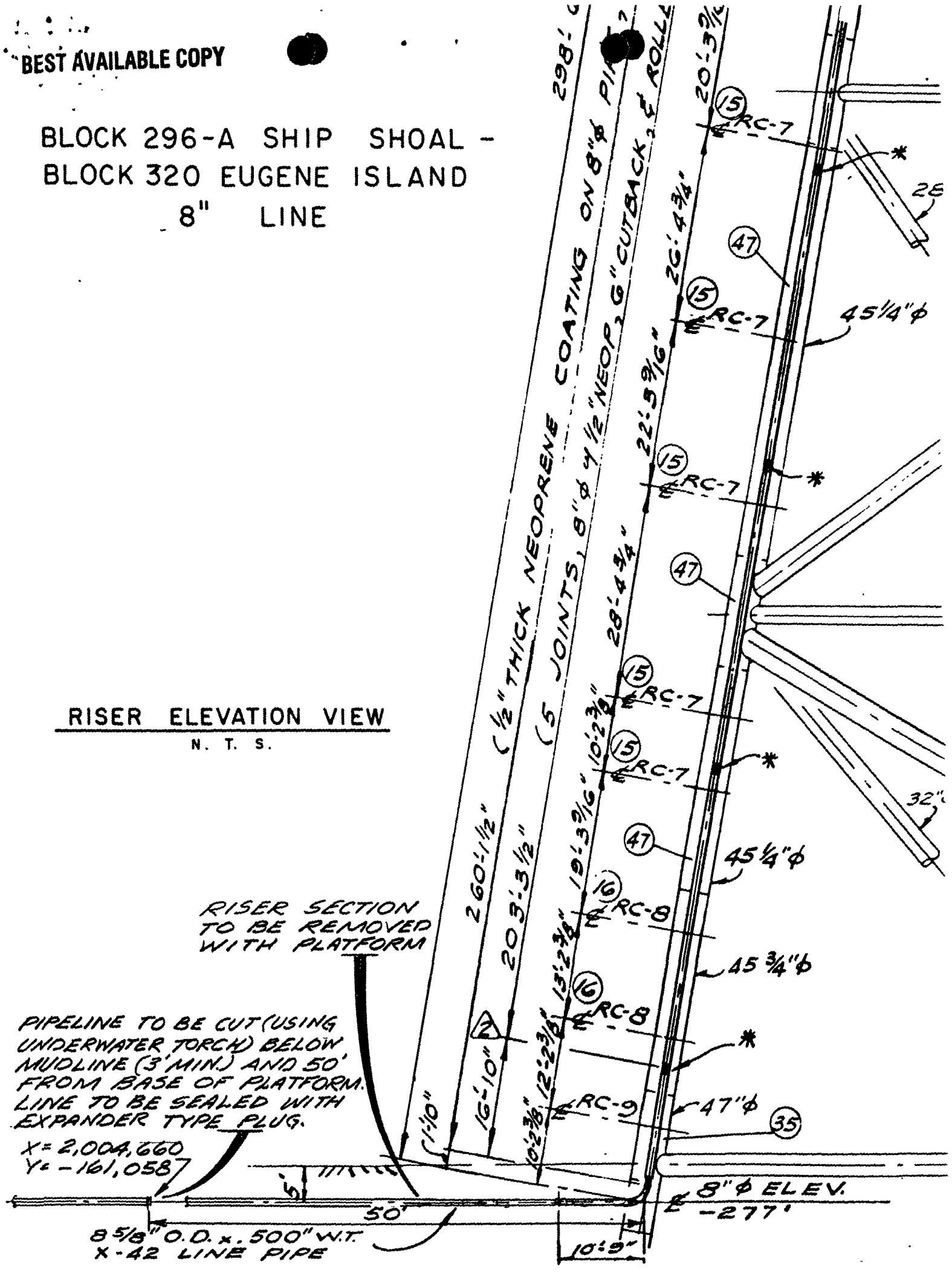
BLOCK 2[redacted]-A SHIP SHOAL - [redacted]
BLOCK 320 EUGENE ISLAND 8" LINE

BEST AVAILABLE COPY

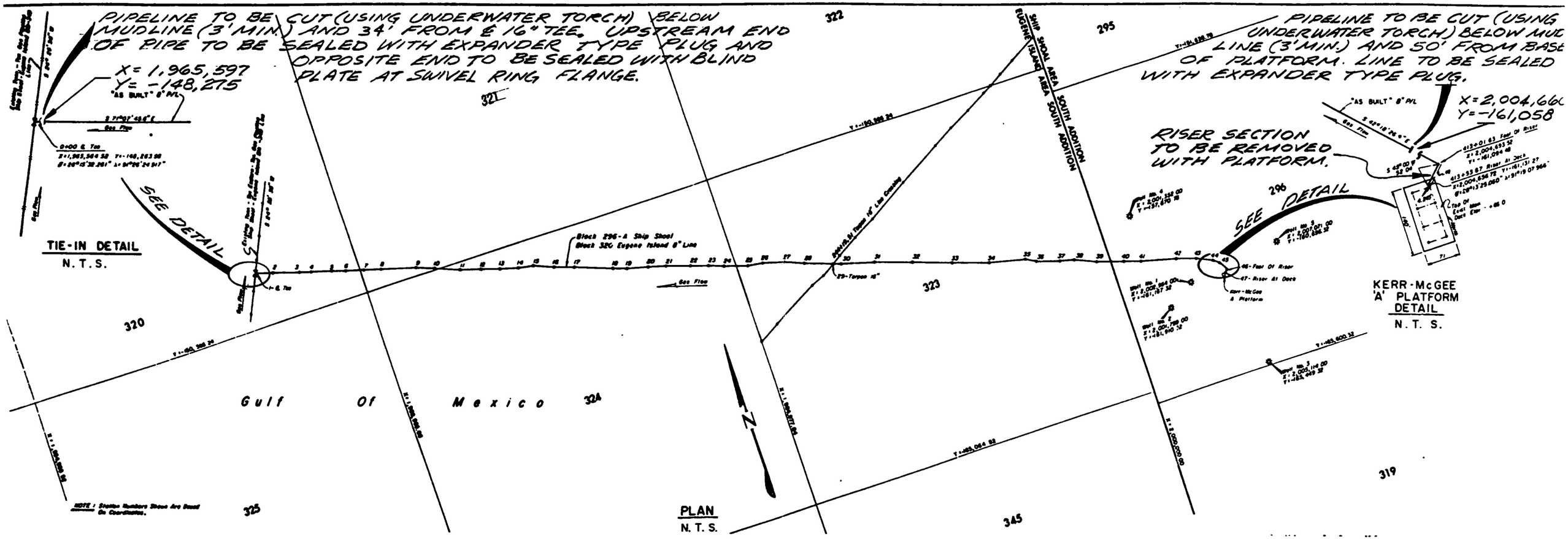


TIE-IN DETAIL AT 30" PIPELINE - BLOCK 320

BLOCK 296-A SHIP SHOAL -
BLOCK 320 EUGENE ISLAND
8" LINE



BLOCK 296-A SHIP SHOAL - BLOCK 320 EUGENE ISLAND 8" LINE



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UNITED STATES GOVERNMENT
MEMORANDUM

03-Sep-98

To: **Leasing Activities Section, Adjudication Unit (MS 5421)**

From: **Petroleum Engineer, Pipeline Unit, Office of Field Operations, Gulf of Mexico OCS Region (MS 5232)**

Subject: Adjudication of Pipeline Right-of-Way Relinquishment

Right-of-Way Number:	OCS-G 4027
Applicant:	Texas Gas Transmission Corporation
Right-of-Way Length:	0. Miles

The subject relinquishment is attached for your adjudication. Any questions should be addressed to the undersigned. The pipeline proposed for abandonment is described as follows:

John Guidry

Attachment

Application dated August 27, 1998 (received September 3, 1998) w/attachment

Please initial, date, and return if this application meets all necessary criteria.

Initial _____, Date 9-19-98

Britton 8/27/92

Stauffer 9/4/92

BEST AVAILABLE COPY

SN5389

In Reply Refer To: MS 5232

SEP 04 1992

Texas Gas Transmission Corporation
Attention: Mr. Frank Williams, Jr.
Post Office Box 1160
Owensboro, Kentucky 42302-1160

Gentlemen:

On November 19, 1991, representatives from Tennessee Gas Pipeline Company (TGP), Department of Transportation's Office of Pipeline Safety, and Minerals Management Service (MMS) met at the Gulf of Mexico Regional Office of the MMS to discuss the maximum allowable operating pressure (MAOP) of TGP's operated BLUE WATER PIPELINE SYSTEM.

As a result of this meeting and after additional follow-up meetings, telecommunications, and review of the applicable regulations, the MMS has determined that the MAOP of the BLUE WATER PIPELINE SYSTEM will be as follows:

1. The main trunkline and all pipelines feeding into it between the Ship Shoal Block 198 "CGP" structure and the Cocodrie, Louisiana plant will be assigned an MAOP of 1,200 psig.

2. The main trunkline and all pipelines feeding into it between the Vermilion Block 245 "CGP" structure and the Ship Shoal Block 198 "CGP" structure will be assigned an MAOP of 1,250 psig.

3. The main trunkline and all pipelines feeding into it between the Eugene Island Block 349 flanged end and the Ship Shoal Block 198 "CGP" structure will be assigned an MAOP of 1,250 psig.

Pipeline Segment No. 5389, associated with your pipeline right-of-way grant OCS-G 4027, will have an assigned MAOP of 1,250 psig.

Should you have any questions regarding this matter, please contact Mr. Autry Britton at (504) 736-2548.

Sincerely,

(Orig. Sgd.) A. Donald Giroir

D. J. Bourgeois
Regional Supervisor
Field Operations

cc: Department of Transportation
2320 La Branch, Room 2116
Houston, Texas 77004

bcc: 1502-01 P/L OCS-G 4027 (KFaust) (MS 5232)
1502-01 P/L OCS-G 4027 (MS 5033)
MS 5260

G4027
SN5389

ABritton:km:8/24/92

SN 5389

In Reply Refer To: LE-3-1
OCS-G 4027

June 16, 1988

Texas Gas Transmission Corporation
Attention: Mr. S. F. Williams
Post Office Box 1160
Owensboro, Kentucky 42302

Gentlemen:

We acknowledge receipt of your request of March 28, 1988, in which you solicit approval for Temporary Suspension of Service of the pipeline constructed under OCS-G 4027. The pipeline being taken out of service is 8 5/8-inches in diameter, 7.83 miles in length, and is located in Block 296, Ship Shoal Area, South Addition; and Blocks 323, 324, 321, and 320, Eugene Island Area, South Addition.

In accordance with 30 CFR 256.89(c) (NOW 30 CFR 250.159(e)), you are hereby granted a temporary suspension of service, subject to the following stipulations:

1. Annual rental is continued to be due and payable on 7.83 miles of right-of-way at $15.00 per mile or fraction thereof, or $120.00 in December of each calendar year.

2. Should you permanently discontinue use of this pipeline, you must obtain approval for abandonment or removal of the pipeline and relinquishment of the subject right-of-way through the Regional Director of the Minerals Management Service.

Sincerely yours,

Original Signed: J. Rogers Pearcy

J. Rogers Pearcy
Regional Director

cc: Case File

bcc: SEQ(256.89)(LE-3-1)

MHolmes:sf

On mgp 6/24/88 RA

United States Department of the Interior

MINERALS MANAGEMENT SERVICE
GULF OF MEXICO OCS REGION

1201 ELMWOOD PARK BOULEVARD
NEW ORLEANS, LOUISIANA 70123-2394

In Reply Refer To: LE-3-1
OCS-G 4027

June 16, 1988

Texas Gas Transmission Corporation
Attention: Mr. S. F. Williams
Post Office Box 1160
Owensboro, Kentucky 42302

Gentlemen:

We acknowledge receipt of your request of March 28, 1988, in which you solicit approval for Temporary Suspension of Service of the pipeline constructed under OCS-G 4027. The pipeline being taken out of service is 8 5/8-inches in diameter, 7.83 miles in length, and is located in Block 296, Ship Shoal Area, South Addition; and Blocks 323, 324, 321, and 320, Eugene Island Area, South Addition.

In accordance with 30 CFR 256.89(c) (NOW 30 CFR 250.159(e)), you are hereby granted a temporary suspension of service, subject to the following stipulations:

1. Annual rental is continued to be due and payable on 7.83 miles of right-of-way at $15.00 per mile or fraction thereof, or $120.00 in December of each calendar year.

2. Should you permanently discontinue use of this pipeline, you must obtain approval for abandonment or removal of the pipeline and relinquishment of the subject right-of-way through the Regional Director of the Minerals Management Service.

Sincerely yours,

J. Rogers Pearcy
Regional Director

cc: Case File

Temporary Suspension of Service

Texas Gas Transmission Corporation, as owner and holder, requests approval for Temporary Suspension of Service of pipeline right-of-way OCS-G 4027 granted to Texas Gas Transmission Corporation by the United States of America Department of the Interior through the Bureau of Land Management, dated June 5, 1979, and described as follows, to wit:

> Right-of-way 200 feet in width for the construction, maintenance, and operation of a 8-5/8 inch natural gas pipeline, 7.83 miles in length, from Kerr-McGee Corporation's Platform "A" in Block 296, Ship Shoal Area, South Addition, crossing a portion of same; thence crossing portions of Blocks 323, 324, 321, and 320, all in Eugene Island Area, South Addition, to a 16" underwater side valve on the Tennessee Gas-Texas Eastern-Texas Gas jointly owned 30" pipeline in Block 320, Eugene Island Area, South Addition, Gulf of Mexico.

Texas Gas Transmission Corporation requests Temporary Suspension of Service in accordance with 30CFR Part 256.89 (12) (c). The procedures for temporarily taking the pipeline out of service are attached to and included as part of this request. During the temporary suspension of service, the pipeline will not constitute an unreasonable hazard to navigation, fishing, or the marine environment. The pipeline will be purged to remove materials, if released, that could be harmful to the marine environment. Since Kerr-McGee Corporation has depleted production at Platform "A" in Block 296, the riser at Platform "A" Block 296 will be removed (when platform removed) and the end of the pipeline that remains underwater beneath the mudline will be plugged according to the attached procedures. At Block 320, the pipeline will be disconnected near the 16" side valve and will also be plugged (below the mudline) according to the attached procedures. Sketches are attached to and included as part of this request showing the location (in x-y coordinates) of the proposed section of pipeline to be approved for Temporary Suspension of Service. Texas Gas Transmission Corporation is currently investigating alternative supplies of gas in the area. Therefore, Texas Gas Transmission Corporation requests Temporary Suspension of Service until further notification that the pipeline will be placed back in service or that the pipeline will be abandoned.

Executed this 28th day of March, 1988

ATTEST:

Joyce Matthews
Asst. Secretary

TEXAS GAS TRANSMISSION CORPORATION

By _____
Vice President

attachments

ACCEPTED

J. Roger Reary
Regional Director

Effective Date APR 4 1988

Proposed Block 296A Ship Shoal - Block 320
Eugene Island 8" Pipeline Abandonment Procedure

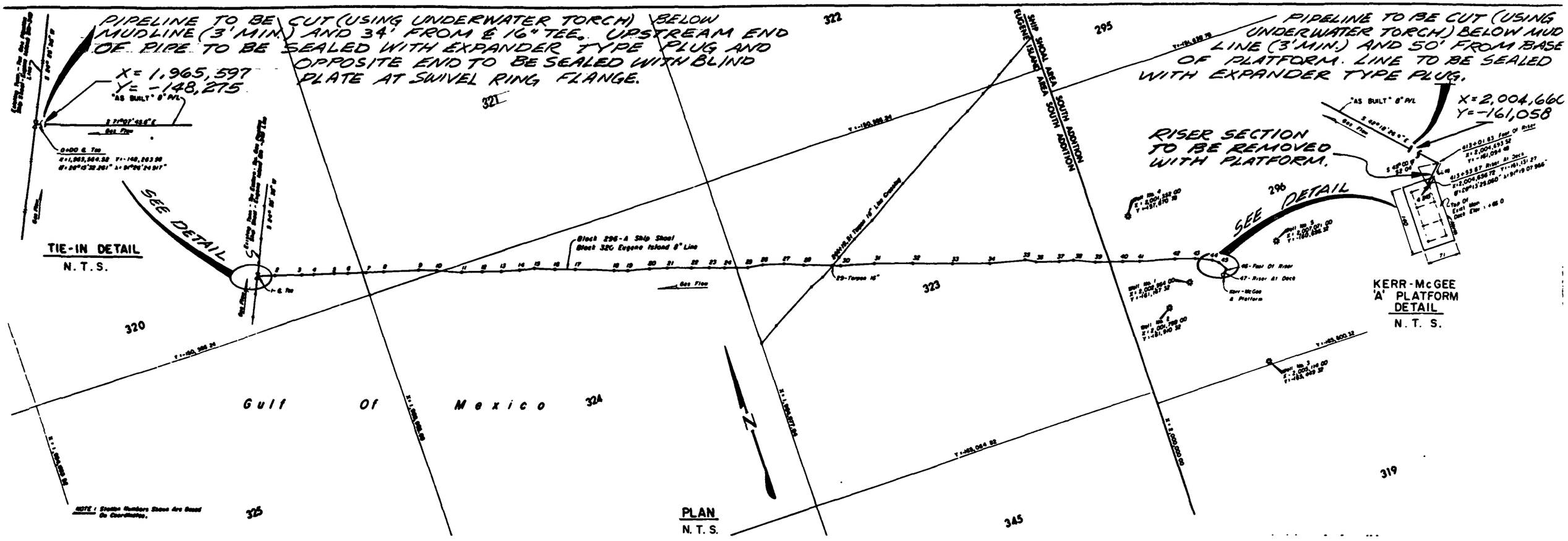
1. Insert pig in line on platform at Block 296 Ship Shoal. Fill line with sea water and 348 gallons of OFC C-2005 Water Soluble Corrosion Inhibitor, 105 gallons of OFC B-648 Biocide, and 348 gallons of OFC OS-939 Oxygen Scavenger. All water and pipeline fluids ahead of the pig will go through the 2" bypass (around the 8" valve) near the 16" side valve and will be collected in the 30" pipeline at Block 320 Eugene Island.

2. At Block 296 Ship Shoal, with divers, cut (using underwater torch) a short pup out of 8" pipeline 50' from base of platform. Install expander type plug (to be furnished by diver) in pipeline and check to verify that end of pipe remains 3'+ below mudline. Riser and underdeck piping shall be left on the platform leg and removed when the platform is salvaged by Kerr-McGee.

3. At Block 320 Eugene Island, with divers, cut (using underwater torch) 8" pipeline approximately 34' upstream from centerline of 16" tee (i.e. 10' upstream of swivel ring flange). Unbolt pipe at swivel ring flange, remove the 10' section of pipe, and install blind plate to remaining swivel ring flange. Insert expander type plug (to be furnished by diver) in line going back to Block 296 Ship Shoal. Check to verify that ends of pipe remain 3'+ below mudline. Lock all side valves in a closed position.

4. Job complete.

BLOCK 296-A SHIP SHOAL - BLOCK 320 EUGENE ISLAND 8" LINE



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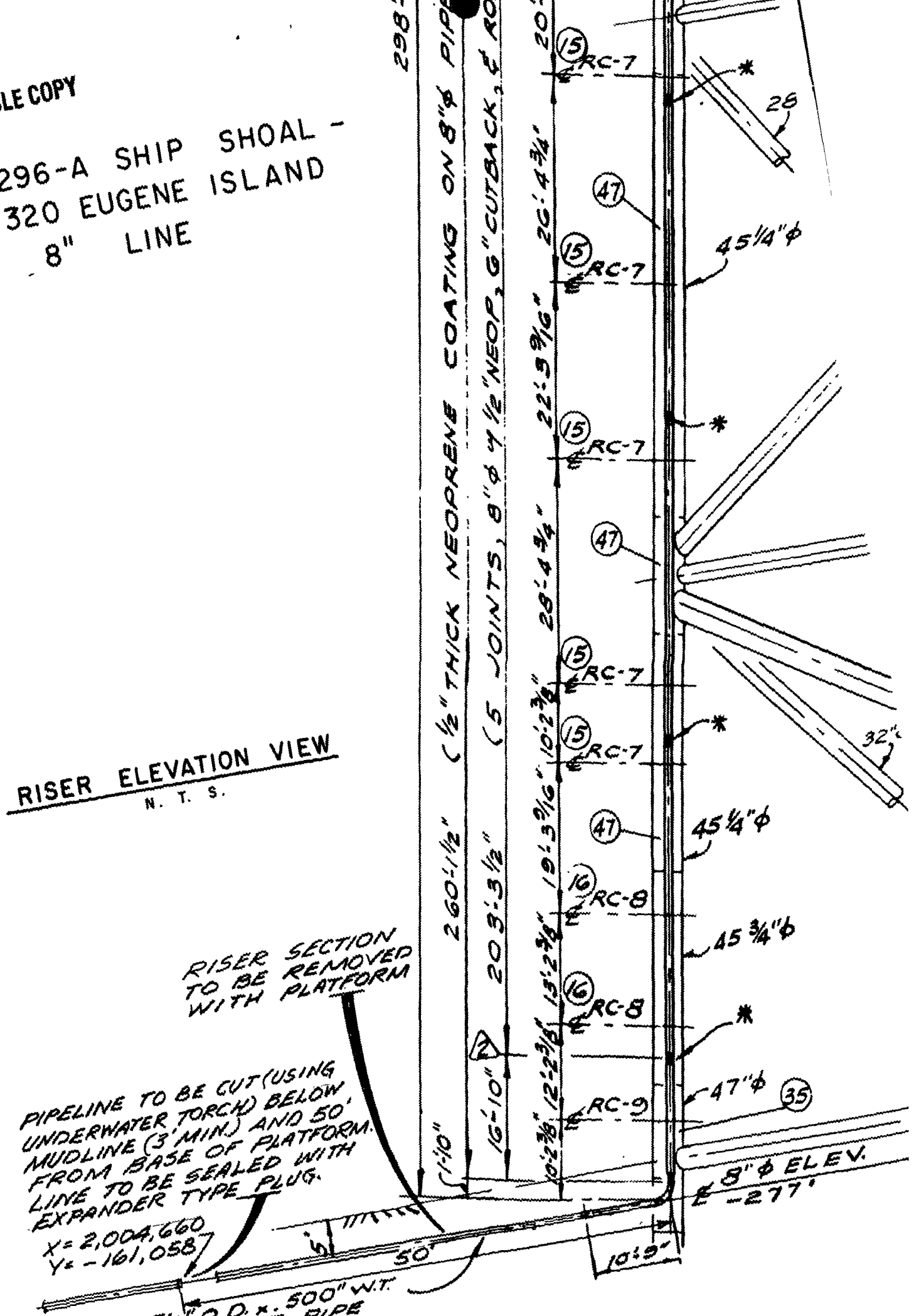
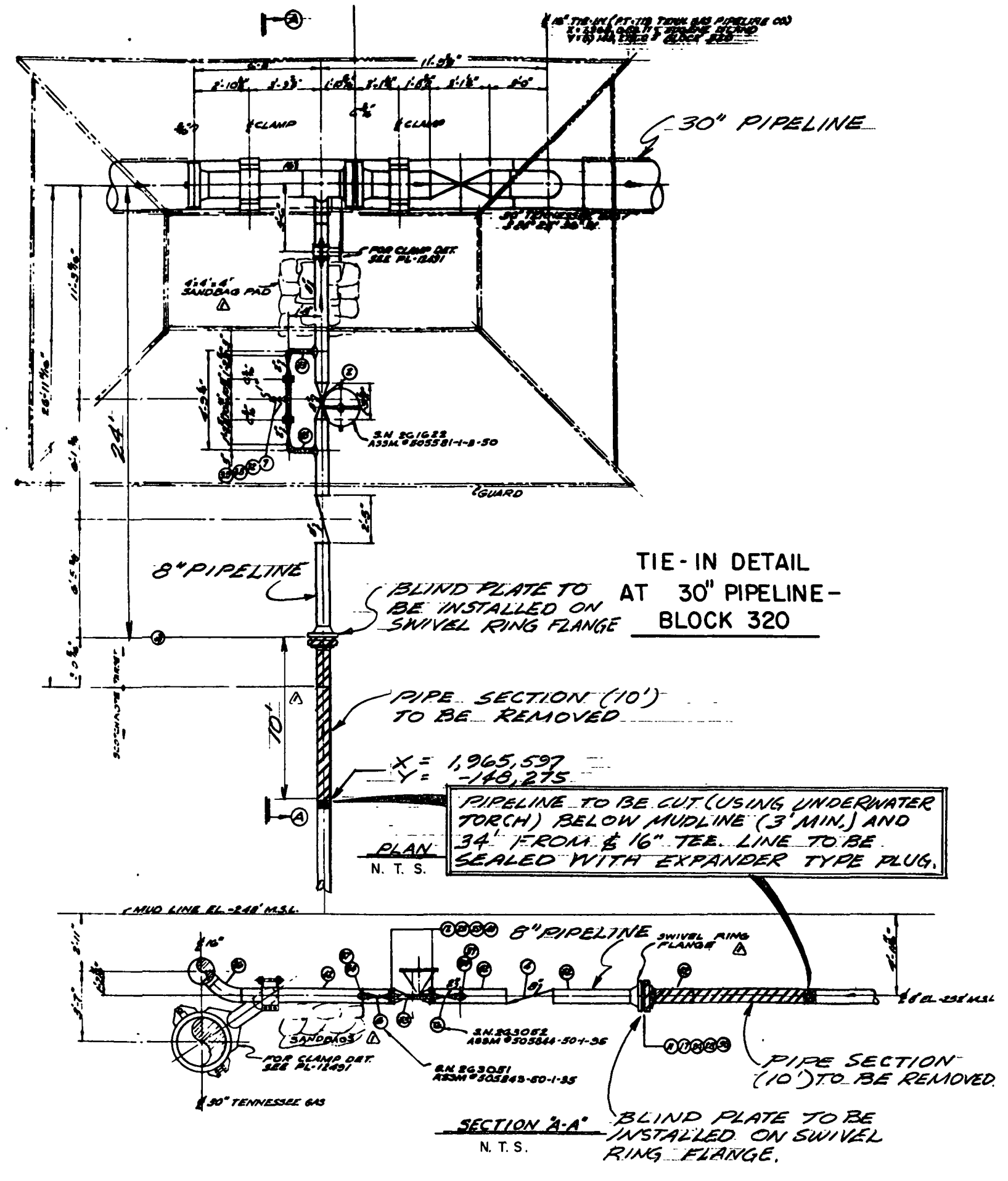
LOCK 296-A SHIP SHOAL -
BLOCK 320 EUGENE ISLAND
8" LINE



BLOCK 2[illegible]-A SHIP SHOAL – BLOCK 320 EUGENE ISLAND 8" LINE



TIE-IN DETAIL AT 30" PIPELINE – BLOCK 320

TEXAS GAS TRANSMISSION CORPORATION

3800 Frederica Street
P.O. Box 1160
Owensboro, Kentucky 42302
Phone: 502/926-8686

March 22, 1988

Mr. Aubrey Britton
Minerals Management Service
1201 Elmwood Park Blvd.
New Orleans, LA

Re: OCS-G-4027

Dear Mr. Britton:

Please find enclosed three (3) executed Temporary Suspension of Service Forms for our 8 5/8-inch natural gas pipeline, 7.83 miles in length, from Kerr-McGee Corporation's Platform "A" in Block 296, Ship Shoal Area, South Addition, thence crossing portions of Blocks 323, 324, 321, and 320, all in Eugene Island Area, South Addition, Gulf of Mexico.

Thank you for your assistance.

Sincerely,

S. F. Williams

S. F. Williams
Manager Permits & Easements

SFW/slm

Enclosures

cc: G. W. Thompson
C. V. Flint
Pete Taylor
Jerry Blandford
Cliff Richard

SN5389

United States Department of the Interior

IN REPLY REFER TO
OCS-G 4027

BUREAU OF LAND MANAGEMENT

NEW ORLEANS OUTER CONTINENTAL SHELF OFFICE
HALE BOGGS FEDERAL BUILDING
500 CAMP STREET-SUITE 841
NEW ORLEANS, LA 70130

Ship Shoal Area,
South Addition;
Eugene Island Area,
South Addition

CERTIFIED MAIL NO. P02 3994371

January 16, 1980

DECISION

Texas Gas Transmission Corporation	:	Right of Way for Pipe Line
	:	Date of Permit: 6/11/79
	:	Decision Requesting Proof of Construction Dated:
	:	Proof of Construction Received: 11/9/79

Proof of Construction Accepted

The above-captioned permittee has submitted the evidence required by the law and regulations 43 CFR 3340.3(a). The proof of construction is hereby accepted and approved. Deviation from original plat has been noted and new plat made a part of the record.

Because permittee has gone out of the right-of-way by ± 50' in Block 321, ± 40' in Block 324, ± 50' in Block 323, Eugene Island Area, South Addition, and by ± 50' in Block 296, Ship Shoal Area, South Addition, Texas Gas Transmission Corporation must notify the operators of the leases and pipelines in those blocks to that effect (see attached list). Return-receipt-cards or letters from the operators evidencing proof of notice must be submitted to this office within 60 days of receipt hereof.

John L. Rankin
Manager

cc: U. S. Geological Survey
(w/dwgs. and report)

Because permittee has gone out of the right-of-way by ± 50' in Block 321, ± 40' in Block 324, ± 50' in Block 323, Eugene Island Area, South Addition, and by ± 50' in Block 296, Ship Shoal Area, South Addition, Texas Gas Transmission Corporation must notify the operators of the following leases in the block indicated to that effect:

Eugene Island Area, South Addition

Block 321		
C & K Offshore Company (Operator)	OCS-G 2610	O&G
Block 324		
Tarpon Transmission Company (Operator)	OCS-G 3459	P/L R/W
Block 323		
Tarpon Transmission Company (Operator)	OCS-G 3459	P/L R/W

Ship Shoal Area, South Addition

Block 296		
Kerr-McGee Corporation (Operator)	OCS-G 1535	O&G

OK
11-9-79

TEXAS GAS TRANSMISSION CORPORATION
Gas Transmission Services Division

3800 Frederica Street
P. O. Box 1160
Owensboro, Kentucky 42301
Phone: 502/926-8686

November 7, 1979

Mr. John L. Rankin
United States Department of the Interior
Bureau of Land Management
New Orleans Outer Continental Shelf Office
Hale Boggs Building
500 Camp Street - Suite 841
New Orleans, Louisiana 70130

Re: OCS-G-4027

Dear Mr. Rankin:

Here are three sets of completion drawings covering the 8-inch pipeline from Block 296, Ship Shoal Area to Block 320, Eugene Island Area, recently constructed pursuant to B.L.M. Permit OCS-G-4027. Each set of the enclosed drawings consists of sheets 1 thru 5 of Drawing No. RS-232 and should be used to replace our Drawings Nos. RS-213, RS-215, RS-229, RS-230 and RS-231 which were forwarded to your office on October 8 and October 17. This latest revision is a change of the drawing number to tie the five drawings together, as a set, in accordance with my conversations with Mrs. Boehm and Mr. Britton of your office.

Yours very truly,

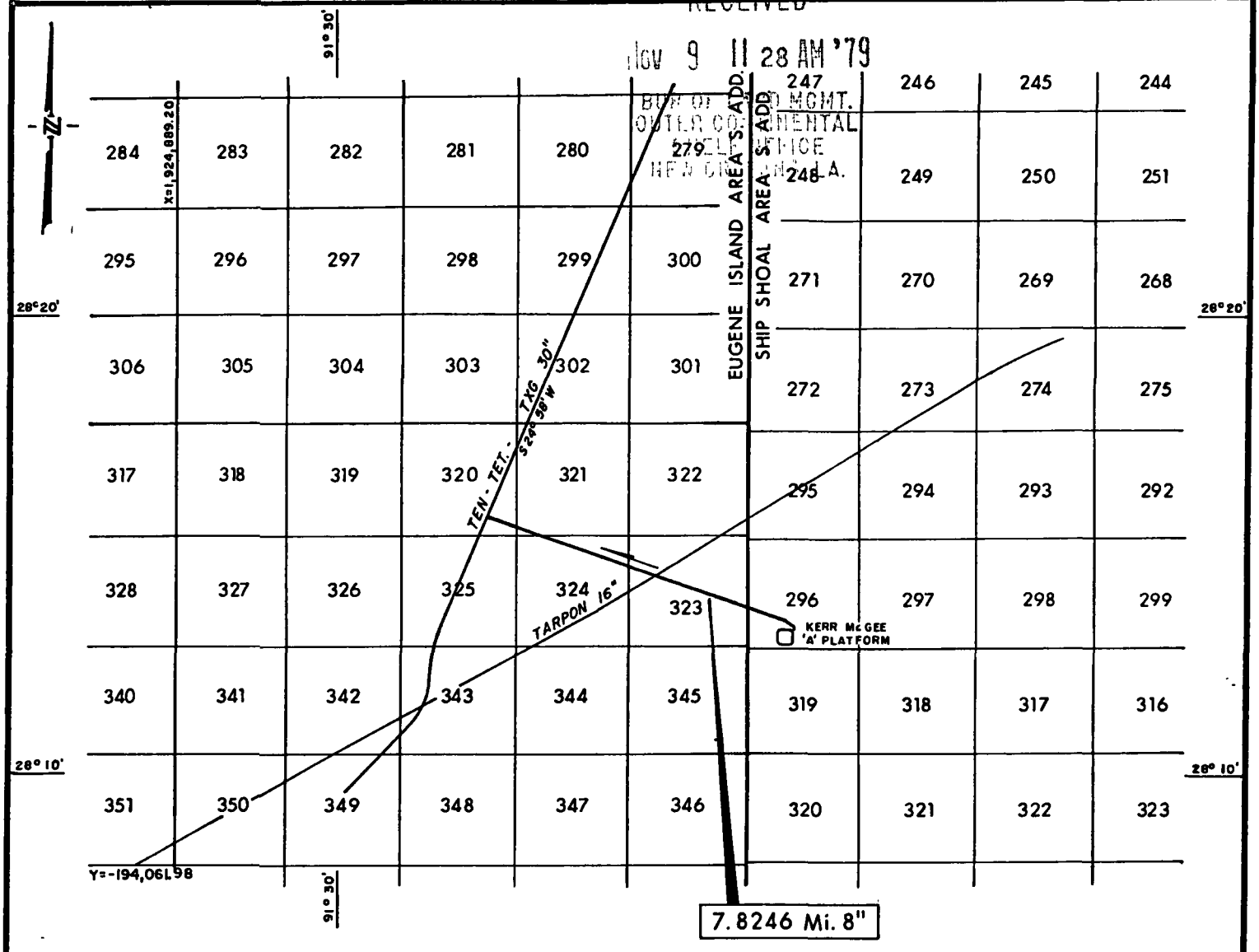
Ralph Jackson
Manager, Permits & Records
Land Department

RJ:lam
Enclosures

cc: Mr. W. R. Jenkins/Mr. G. W. Thompson/Mr. A. R. Wilson
Mr. J. C. Klumpp/Att
Mr. H. L. Gibson

RECEIVED

Nov 9 11 28 AM '79



NOTE:
ALL TEXAS GAS PIPING MEETS OR EXCEEDS PART 192, TITLE 49, CODE OF FEDERAL REGULATIONS.

"AS BUILT" OCS-G 4027

STATE OF KENTUCKY
D.L. JOLLY 2843
REGISTERED
PROFESSIONAL ENGINEER

LOCATION OF RIGHT-OF-WAY HAS BEEN ACCURATELY DELINEATED UPON THIS MAP

Douglas L. Jolly

Douglas L. Jolly, KY 2843

TEXAS GAS TRANSMISSION CORP.
OWENSBORO, KENTUCKY

BLOCK 296-A SHIP SHOAL
BLOCK 320 EUGENE ISLAND 8" LINE

INDEX MAP

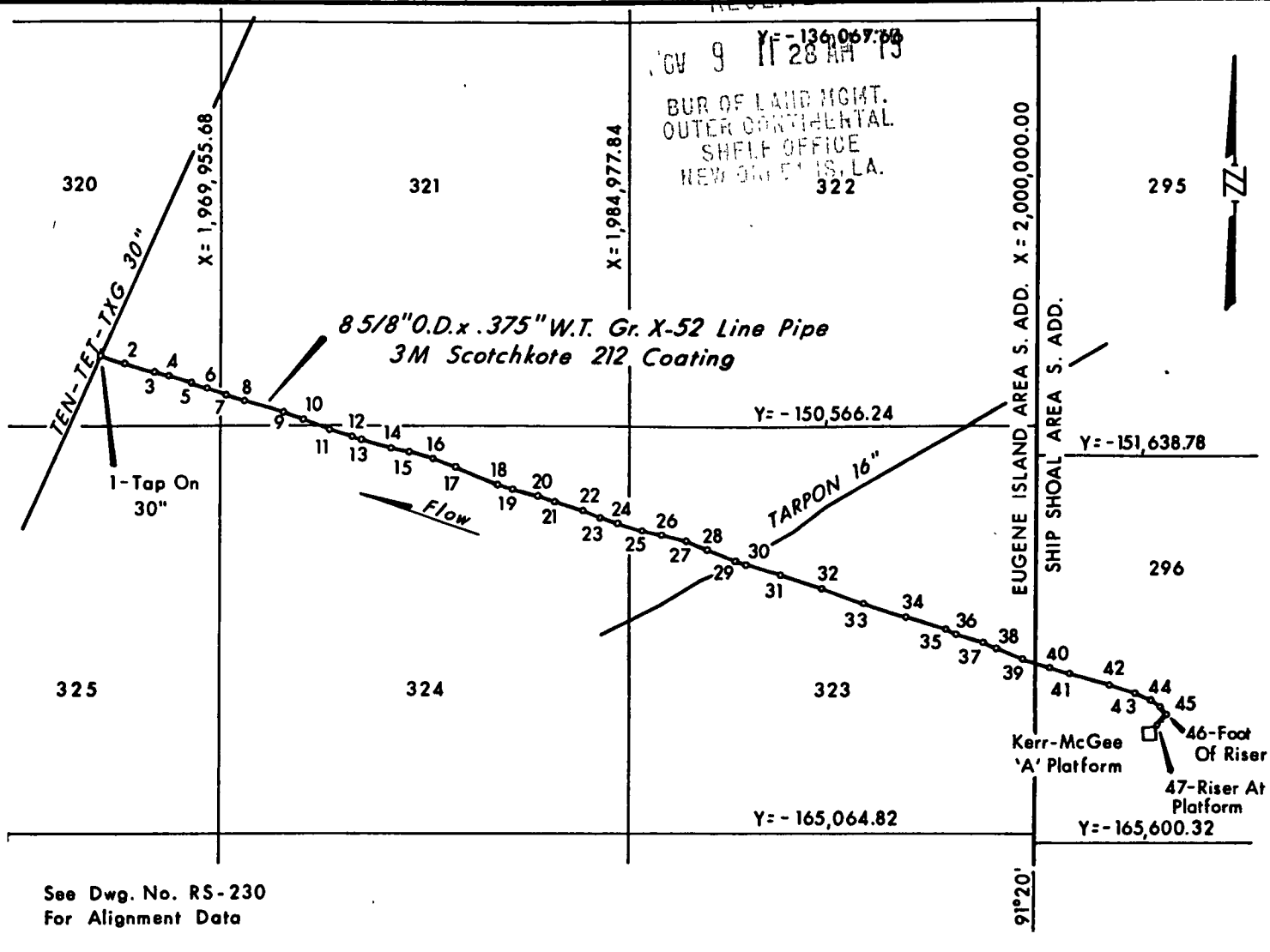
SHIP SHOAL & EUGENE ISLAND AREAS
OFFSHORE LOUISIANA

NO.	DATE	DESCRIPTION	BY	CHK'D	APP'D
2	11-1-79	Change Dwg. No. From RS-213 To RS-232	J.N.	D.L.J.	DJ
1	9-20-79	"AS BUILT"	M.W.H.	D.L.J.	DJ
0	3-23-79	Proposed Location	J.N.	D.L.J	DJ

REVISIONS

SCALE NOTED	DATE 3-23-79
DRAWN J. N.	APPROVED DJ
TRACED	APPROVED
CHECKED D.L.J.	ENGR. DEPT.
FILE NO. 4211044	

DWG. NO. RS-232 SHEET 1 OF 5



See Dwg. No. RS-230
For Alignment Data

6000 0 6000 12,000 18,000 24,000
SCALE IN FEET

NOTE:
All Texas Gas Piping meets or exceeds Part 192, Title 49, Code of Federal Regulations.

NOTE:
This pipeline is used to transport natural gas from Louisiana to the market. All bearings are Lambert. "AS BUILT" Permanent Right-of-Way 200' Wide. Line installed (℄ 30" to Foot of Riser) 41,314' = 7.8246 Mi.

"AS BUILT"

SEE RS-215 FOR PROFILE OCS-G 4027

TEXAS GAS TRANSMISSION CORP.
OWENSBORO, KENTUCKY

BLOCK 296-A SHIP SHOAL
BLOCK 320 EUGENE ISLAND 8" LINE
NATURAL GAS PIPELINE &
RIGHT-OF-WAY
SHIP SHOAL & EUGENE ISLAND AREAS
OFFSHORE LOUISIANA.

SCALE AS SHOWN	DATE 9-20-79
DRAWN M.W.H.	APPROVED O.J. COX
TRACED	APPROVED
CHECKED D.L.J.	ENGR. DEPT.
FILE NO. 4211044	

DWG. NO. RS-232 SHEET 2 OF 5

NO.	DATE	DESCRIPTION	BY	CHK'D	APP'D
1	11-1-79	Change Dwg No. From RS-229 To RS-232	J.N.	D.L.J.	

REVISIONS

ALIGNMENT DATA

℄ Tee	1	0+00.00	X=1,965,564.52	Y=-148,263.98
		S71°07'45.6"E	Ø=28°15'32.261"	λ=91°26'24.917"
	2	9+01.95	X=1,966,417.99	Y=-148,555.70
		S72°46'51.4"E	Ø=28°15'29.381"	λ=91°26'15.374"
	3	20+86.85	X=1,967,549.78	Y=-148,906.46
		S72°35'09.5"E	Ø=28°15'25.919"	λ=91°26'02.720"
	4	25+85.92	X=1,968,025.98	Y=-149,055.82
		S73°25'27.5"E	Ø=28°15'24.445"	λ=91°25'57.395"
	5	34+52.12	X=1,968,856.18	Y=-149,302.93
		S73°56'25.9"E	Ø=28°15'22.006"	λ=91°25'48.113"
	6	40+44.77	X=1,969,425.71	Y=-149,466.88
		S73°15'31.2"E	Ø=28°15'20.388"	λ=91°25'41.746"
	7	47+98.35	X=1,970,147.35	Y=-149,683.95
		S73°11'32.2"E	Ø=28°15'18.246"	λ=91°25'33.678"
	8	55+51.60	X=1,970,868.42	Y=-149,901.76
		S74°14'40.4"E	Ø=28°15'16.096"	λ=91°25'25.616"
	9	70+14.53	X=1,972,276.38	Y=-150,298.99
		S71°28'20.5"E	Ø=28°15'12.175"	λ=91°25'09.875"
	10	77+69.12	X=1,972,991.86	Y=-150,538.77
		S67°33'06.0"E	Ø=28°15'09.807"	λ=91°25'01.876"
	11	88+45.53	X=1,973,986.71	Y=-150,949.80
		S72°48'34.9"E	Ø=28°15'05.745"	λ=91°24'50.753"
	12	97+12.20	X=1,974,814.66	Y=-151,205.94
		S73°54'28.3"E	Ø=28°15'03.216"	λ=91°24'41.497"
	13	104+76.96	X=1,975,549.46	Y=-151,417.92
		S73°41'32.6"E	Ø=28°15'01.123"	λ=91°24'33.283"
	14	112+75.45	X=1,976,315.82	Y=-151,642.13
		S78°30'03.4"E	Ø=28°14'58.908"	λ=91°24'24.716"
	15	119+21.84	X=1,976,949.24	Y=-151,770.99
		S71°06'30.6"E	Ø=28°14'57.637"	λ=91°24'17.635"
	16	127+77.49	X=1,977,758.80	Y=-152,048.03
		S70°13'43.1"E	Ø=28°14'54.900"	λ=91°24'08.585"
	17	136+30.34	X=1,978,561.37	Y=-152,336.52
		S69°43'07.3"E	Ø=28°14'52.049"	λ=91°23'59.613"
	18	152+30.75	X=1,980,062.56	Y=-152,891.27
		S71°45'52.0"E	Ø=28°14'46.567"	λ=91°23'42.831"
	19	158+69.53	X=1,980,669.26	Y=-153,091.16
		S76°03'11.9"E	Ø=28°14'44.592"	λ=91°23'36.049"
	20	167+35.31	X=1,981,509.52	Y=-153,299.83
		S73°57'19.9"E	Ø=28°14'42.530"	λ=91°23'26.657"
	21	174+67.78	X=1,982,213.45	Y=-153,502.27
		S70°52'23.0"E	Ø=28°14'40.530'	λ=91°23'18.788"
	22	185+01.25	X=1,983,189.87	Y=-153,840.90
		S70°29'31.6"E	Ø=28°14'37.183"	λ=91°23'07.874"
	23	192+77.23	X=1,983,921.31	Y=-154,100.03
		S72°17'51.0"E	Ø=28°14'34.621"	λ=91°22'59.698"
	24	199+32.53	X=1,984,545.58	Y=-154,299.29
		S70°50'01.7"E	Ø=28°14'32.652"	λ=91°22'52.720"
	25	208+90.23	X=1,985,450.19	Y=-154,613.71
		S79°46'30.7"E	Ø=28°14'29.544"	λ=91°22'42.609"
	26	215+21.51	X=1,986,071.45	Y=-154,725.77
		S76°17'20.3"E	Ø=28°14'28.437"	λ=91°22'35.665"
	27	224+52.13	X=1,986,975.55	Y=-154,946.35
		S66°00'48.9"E	Ø=28°14'26.257"	λ=91°22'25.560"
	28	233+00.53	X=1,987,750.68	Y=-155,291.24
		S71°26'33.5"E	Ø=28°14'22.846"	λ=91°22'16.896"
Tarpon	29	244+19.51	X=1,988,811.48	Y=-155,647.36
		S71°31'04.6"E	Ø=28°14'19.324"	λ=91°22'05.039"
	30	248+23.41	X=1,989,194.55	Y=-155,775.40
		S74°38'32.0"E	Ø=28°14'18.058"	λ=91°22'00.758"
	31	262+45.83	X=1,990,566.17	Y=-156,152.12
		S72°15'28.4"E	Ø=28°14'14.333"	λ=91°21'45.428"
	32	278+51.03	X=1,992,095.03	Y=-156,641.28
		S70°12'28.0"E	Ø=28°14'09.495"	λ=91°21'28.341"
	33	295+17.70	X=1,993,663.24	Y=-157,205.63
		S72°02'39.5"E	Ø=28°14'03.913"	λ=91°21'10.815"
	34	311+05.21	X=1,995,173.43	Y=-157,695.03
		S75°35'26.6"E	Ø=28°13'59.071"	λ=91°20'53.937"
	35	326+21.00	X=1,996,641.54	Y=-158,072.23
		S63°28'33.6"E	Ø=28°13'55.339"	λ=91°20'37.531"
	36	330+82.90	X=1,997,054.82	Y=-158,278.50
		S72°57'32.6"E	Ø=28°13'53.298"	λ=91°20'32.912"
	37	340+78.99	X=1,998,007.18	Y=-158,570.41
		S75°15'09.0"E	Ø=28°13'50.409"	λ=91°20'22.269"
	38	346+72.37	X=1,998,581.01	Y=-158,721.46
		S66°53'53.9"E	Ø=28°13'48.914"	λ=91°20'15.857"
	39	356+11.95	X=1,999,445.25	Y=-159,090.12
		S73°29'11.3"E	Ø=28°13'45.266"	λ=91°20'06.199"
	40	367+37.89	X=2,000,524.75	Y=-159,410.16
		S70°36'14.5"E	Ø=28°13'42.098"	λ=91°19'54.136"
	41	374+60.01	X=2,001,205.88	Y=-159,649.97
		S75°30'45.1"E	Ø=28°13'39.724"	λ=91°19'46.525"
	42	389+81.70	X=2,002,679.19	Y=-160,030.65
		S71°31'35.6"E	Ø=28°13'35.956"	λ=91°19'30.062"
	43	398+57.31	X=2,003,509.68	Y=-160,308.10
		S65°59'34.3"E	Ø=28°13'33.209"	λ=91°19'20.782"
	44	405+84.51	X=2,004,173.97	Y=-160,603.96
		S52°09'28.0"E	Ø=28°13'30.280"	λ=91°19'13.359"
	45	409+00.49	X=2,004,423.50	Y=-160,797.81
		S42°18'26.9"E	Ø=28°13'28.361"	λ=91°19'10.571"
Foot of Riser	46	413+01.63	X=2,004,693.52	Y=-161,094.48
		S45°00'00.0"W	Ø=28°13'25.424"	λ=91°19'07.554"
Riser at Deck	47	413+53.67	X=2,004,656.72	Y=-161,131.27
			Ø=28°13'25.060"	λ=91°19'07.966"

"AS BUILT" OCS-G 4027

TEXAS GAS TRANSMISSION CORP.
OWENSBORO, KENTUCKY

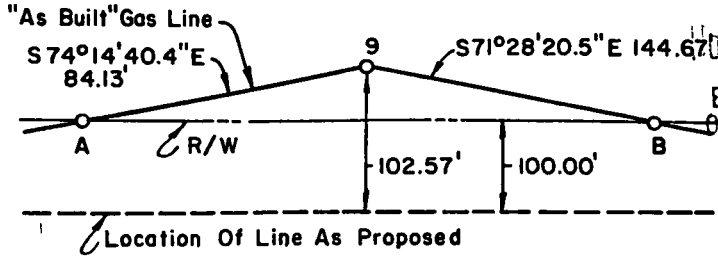
BLOCK 296-A SHIP SHOAL
BLOCK 320 EUGENE ISLAND 8" LINE
NATURAL GAS PIPELINE & RIGHT-OF-WAY
SHIP SHOAL & EUGENE ISLAND AREAS
OFFSHORE LOUISIANA

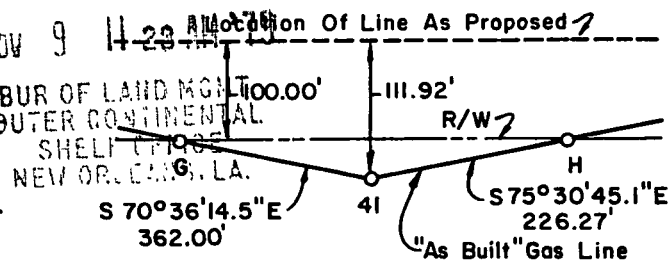
SCALE NONE	DATE 9-21-79
DRAWN M.W.H.	APPROVED
TRACED	APPROVED
CHECKED D.L.J.	
FILE NO. 4211044	ENGR. DEPT.

NO.	DATE	DESCRIPTION	BY	CHK'D	APP'D
1	11-1-79	Change Dwg. No. From RS-230 To RS-232	J.N.	D.L.J.	

REVISIONS

DWG. NO. RS-232 SHEET 3 OF 5



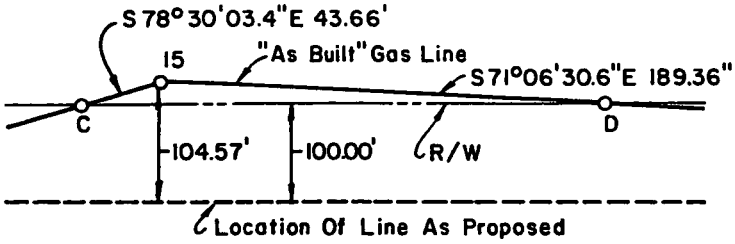


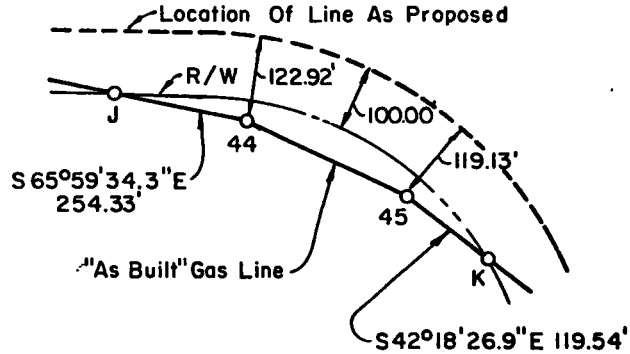
A X=1,972,195.41 Y=-150,276.15
Ø=28°15'12.400" λ=91°25'10.780"
B X=1,972,413.55 Y=-150,344.96
Ø=28°15'11.721" λ=91°25'08.342"

POINT 9

G X=2,000,864.42 Y=-159,529.75
Ø=28°13'40.914" λ=91°19'50.340"
H X=2,001,424.95 Y=-159,706.58
Ø=28°13'39.164" λ=91°19'44.077"

POINT 41



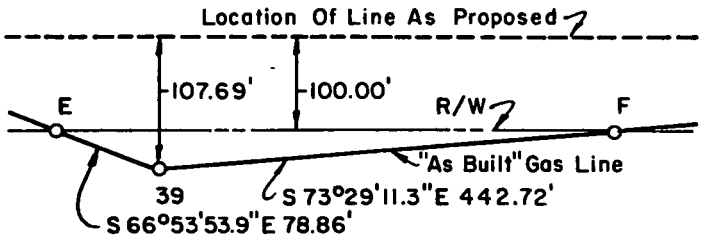


C X=1,976,906.46 Y=-151,762.29
Ø=28°14'57.723" λ=91°24'18.113"
D X=1,977,128.40 Y=-151,832.30
Ø=28°14'57.031" λ=91°24'15.632"

POINT 15

J X=2,003,941.64 Y=-160,500.49
Ø=28°13'31.304" λ=91°19'15.955"
K X=2,004,503.97 Y=-160,886.22
Ø=28°13'27.486" λ=91°19'09.672"

POINTS 44 & 45



E X=1,999,372.71 Y=-159,059.18
Ø=28°13'45.572" λ=91°20'07.010"
F X=1,999,869.70 Y=-159,215.96
Ø=28°13'44.020 λ=91°20'01.456"

POINT 39

"AS BUILT" OCS-G 4027

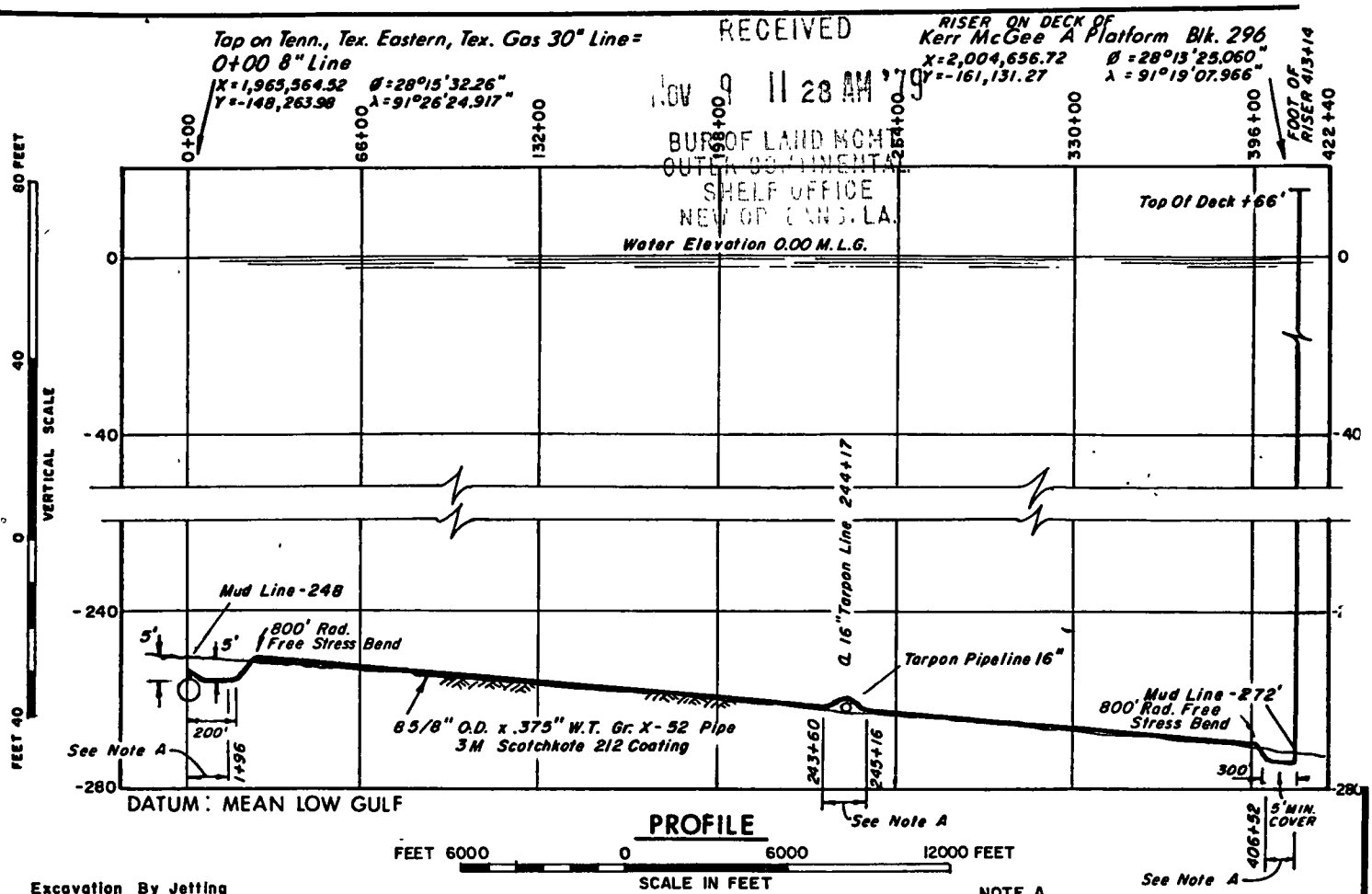
TEXAS GAS TRANSMISSION CORP.
OWENSBORO, KENTUCKY

BLOCK 296-A SHIP SHOAL
BLOCK 320 EUGENE ISLAND 8" LINE
NATURAL GAS PIPELINE &
RIGHT-OF-WAY
SHIP SHOAL & EUGENE ISLAND AREAS
OFFSHORE LOUISIANA

SCALE NONE	DATE 9-28-79
DRAWN MWH	APPROVED
TRACED	APPROVED
CHECKED DLJ	ENGR. DEPT.
FILE NO. 4211044	
DWG. NO. RS-232	SHEET 4 OF 5

NO.	DATE	DESCRIPTION	BY	CHK'D	APP'D
1	11-1-79	Change Dwg. No. From RS-231 To RS-232	J.N.	D.L.J.	

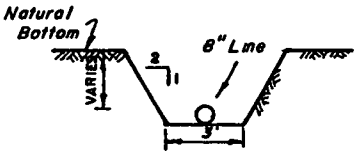
REVISIONS



PROFILE

FEET 6000 0 6000 12000 FEET
SCALE IN FEET

Excavation By Jetting
TOTAL EXCAVATION 1,600 CU. YDS.±



TYPICAL DITCH SECTION
NO SCALE

PIPE SUMMARY

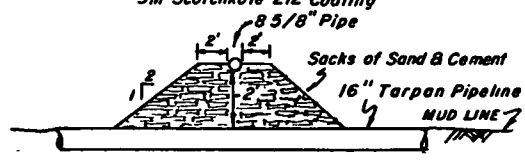
8 5/8" O.D. x .500" W.T. GRX-42	1,014'
8 5/8" O.D. x .375 W.T. GRX-52	40,300'
	41,314'

LOCATION OF ANODES (2 Per Station)

1+96	135+29	278+38
7+77	151+29	294+20
23+67	167+08	310+14
39+64	182+91	326+04
55+48	198+91	342+00
71+58	214+81	357+96
87+38	230+78	373+93
103+35	246+49	389+80
119+34	262+48	405+91

Anodes are 215# Zinc

NOTE A
8 5/8" O.D. x .500" W.T. Gr. X-42
3M Scotchkote 212 Coating



TARPON CROSSING
NO SCALE

SEE RS-214 FOR PLAN

"AS BUILT"

NOTE:
ALL TEXAS GAS PIPING MEETS OR EXCEEDS PART 192, TITLE 49, CODE OF FEDERAL REGULATIONS.

TEXAS GAS TRANSMISSION CORP.
OWENSBORO, KENTUCKY

BLOCK 296-A SHIP SHOAL
BLOCK 320 EUGENE ISLAND 8" LINE
NATURAL GAS PIPELINE
PROFILE
SHIP SHOAL & EUGENE ISLAND AREAS
OFFSHORE LOUISIANA

NO.	DATE	DESCRIPTION	BY	CHK'D	APP'D
2	11-1-79	Change Dwg. No. From RS-215 To RS-232	J.N.	D.L.J.	DJ
1	9-26-79	"AS BUILT"	MWH	D.L.J.	DJ CWF
0	3-23-79	Proposed Location	J.N.	D.L.J.	DJ

REVISIONS

SCALE AS SHOWN	DATE 3-23-79
DRAWN J.N.	APPROVED DJ
TRACED	APPROVED
CHECKED D.L.J.	ENGR. DEPT.
FILE NO. 4211044	

DWG. NO. RS-232 SHEET 5 OF 5

TEXAS GAS TRANSMISSION CORPORATION
Gas Transmission Services Division

3800 Frederica Street
P. O. Box 1160
Owensboro, Kentucky 42301
Phone: 502/926-8686

October 8, 1979

Mr. John L. Rankin
United States Department of the Interior
Bureau of Land Management
New Orleans Outer Continental Shelf Office
Hale Boggs Building
500 Camp Street - Suite 841
New Orleans, Louisiana 70130

Re: OCS-G-4027

Dear Mr. Rankin:

The 8-inch pipeline from Block 296, Ship Shoal Area to Block 320, Eugene Island Area, has been constructed pursuant to the Bureau of Land Management Permit OCS-G-4027, dated June 5, 1979. As proof of construction, we are enclosing duplicate sets of our "as built" Drawings Nos. RS-213, RS-215, RS-229, RS-230 and RS-231. The last two numbered drawings show deviations from the originally planned route.

Also enclosed are two copies of the hydrostatic test reports.

Yours very truly,

Ralph Jackson
Manager, Permits & Records
Land Department

RJ:lam
Enclosures

cc: Mr. W. R. Jenkins/Mr. G. W. Thompson/Mr. A. R. Wilson
Mr. J. C. Klumpp/Atts
Mr. H. L. Gibson

TEXAS GAS TRANSMISSION CORPORATION
Gas Transmission Services Division

3800 Frederica Street
P. O. Box 1160
Owensboro, Kentucky 42301
Phone: 502/926-8686

October 17, 1979

Ms. La Nelle Boehm
United States Department of the Interior
Bureau of Land Management
New Orleans Outer Continental Shelf Office
Hale Boggs Building
500 Camp Street - Suite 841
New Orleans, Louisiana 70130

Re: OCS-G-4027

Dear Ms. Boehm:

We are forwarding certified sets of our completion drawings for the 8-inch pipeline construction pursuant to the above-referenced right of way permit. Each set of these drawings consists of our Drawings Nos. RS-213, RS-229, RS-230, RS-231 and RS-215.

We are also returning the copies of the hydrostatic test results. The attached material is submitted as proof of construction for the aforementioned pipeline and is in accordance with our telephone conversation yesterday afternoon.

Yours very truly,

Ralph Jackson
Manager, Permits & Records
Land Department

RJ:lam
Enclosures

cc: Mr. W. R. Jenkins/Mr. G. W. Thompson/Mr. A. R. Wilson
Mr. J. C. Klumpp/Att
Mr. H. L. Gibson

BLOCK 296A - SHIP SHOAL

BLOCK 320 EUGENE ISLAND

8" LINE

A hydrostatic test was conducted on approximately 40,300' of 8-5/8" O.D. x 0.375" W.T., X-52 pipe and 1,014' of 8-5/8" O.D. x 0.500" W.T., X-42 pipe from Station 0+00 to Station 413+14 in Offshore Gulf of Mexico, Louisiana.

A test pressure of 2170 psig, based on ANSI-600 valve shell test pressure limits, was maintained for an eight-hour period on August 18, 1979.

This was a satisfactory test with no failure. Repressure was required seven times. Refer to Drawing PL-12517 and C.O. 21809. Heavy wall pipe is from Station 0 to 1+96, 243+60 to 245+16, 406+52 to 413+14.

CWS:sld
9-24-79

C. S. I. HYDROSTATIC TESTERS

Hydrostatic Test Report

P.O. BOX 51282, O.C.S. LAFAYETTE, LA. 70505

Company TEXAS GAS

Line _____ Location SS 296-A Job No. _____ Length 7.5 MILES ft.

Line Size 8" O.D. _____ W.T. Gr. _____ Sta/M.P. _____ to Sta/M.P. _____

Terrain Gulf Soil Condition _____

Fill began 8/17/79 at 6:00 ~~A~~P.M. Fill Completed 8/17/79 at 8:00 ~~A~~P.M.

Meter Reading: Beginning 05625100 Gals., Final 108000 Gal.

Displacement: Theoretical _____ Gal., Meas. _____ Gal.

Gallons Required to increase pressure from _____ P.S.I.G. to _____ P.S.I.G. _____ Gal.
PRESSURE PUMP MEASUREMENT

Exposed pipe 20 ft. General Contractor J. RAY MCDERMOTT

Fill water Temperature

CHARTS RETAINED BY INSPECTOR

TIME		Deadweight Pressure	TEMPERATURE OF			REMARKS
Date	Hour		Air	Pipe	Remote Earth	
8/17/79	9:30PM	0-317	87			
	10:30	317-2100	86			Valve leak
	11:00	2175	86			On test
	11:20	2170-2175	86			Repressure
	11:30	2174	86			
	11:45	2170-2175	86			Repressure
8/18/79	12:00AM	2172	86			
	12:15	2170-2175	86			Repressure
	12:30	2174	86			
	12:55	2170-2175	86			Repressure
	1:00	2175	85			
	1:30	2171	85			
	1:40	2170-2175	85			Repressure
	2:00	2175	85			
	2:30	2173	85			
	3:00	2171	85			
	3:10	2170-2175	85			Repressure
	3:30	2174	85			
	4:00	2173	85			
	4:30	2171	81			
	4:40	2170-2175	84			Repressure
	5:00	2175	84			

CSI Engineer Dan McAvoy

Witness 1 _____

2 _____

Field Approval for Pipeline Company

Insp Charles G. Brown

Chief Insp. Dale E Cassuch

C. S. I. HYDROSTATIC TESTERS

Hydrostatic Test Report

P. O. BOX 51282, O.C.S. LAFAYETTE, LA. 70505

Line _____ Location SS 296-A Job No. _____ Length 7.5 MILES ~~XX~~

Line Size 8" O.D. _____ W.T. Gr. _____ Sta/M.P. _____ to Sta/M.P. _____

CHARTS RETAINED BY INSPECTOR

TIME		Dead Weight Pressure	TEMPERATURE OF			REMARKS
DATE	HOUR		Air	Pipe	Remote Earth	
8/18/79	5:30AM	2174	85			
	6:00	2173	85			
	6:30	2172	85			
	7:00	2172	85			
	7:12	2172	85			Off test

CSI Engineer Dan McAvoy

Witness 1 _____

2 _____

Field Approval for Pipeline Company

Insp. Charles G. Brown

Chief Insp. _____

A Hargett Company

September 18, 1979

Mr. Mike Lam
J. RAY MCDERMOTT & COMPANY, INC.
P.O. Drawer 38
Harvey, LA 70059

RE: TEXAS GAS
7.5 MILES - 8"
SHIP SHOAL 296-A

Dear Mr. Lam:

We have carefully reviewed and evaluated all data assembled from the hydrostatic test on TEXAS GAS' subject line.

Upon completion of the fill of the line, a hydrostatic test was performed using approved engineering practices and procedures. Information detailed on the required test forms show conclusively that the pipeline is as safe as today's technology can produce.

From the test results it is concluded that TEXAS GAS has used the latest advanced scientific developments in the field of hydrostatic testing in compliance with all current state and federal safety regulations.

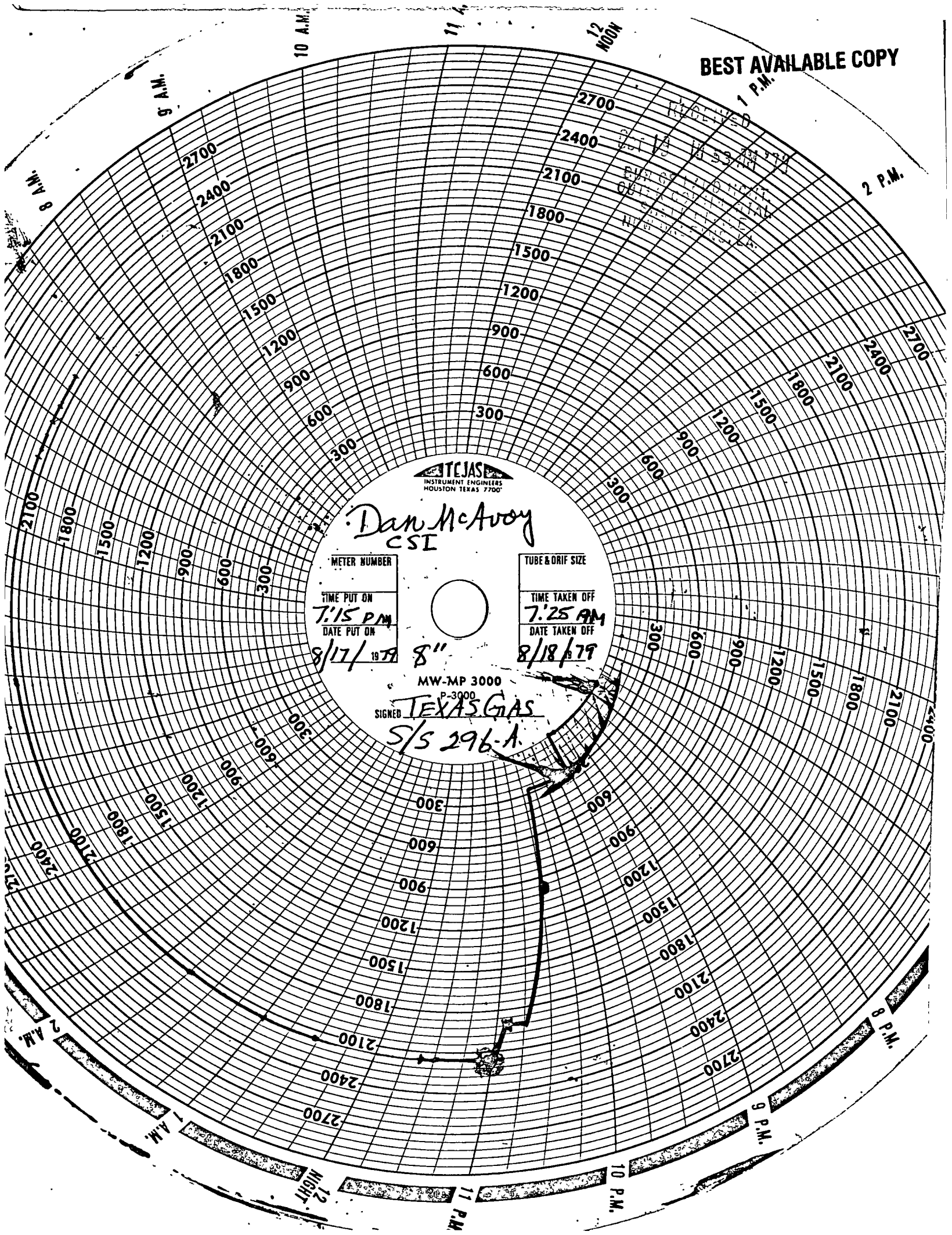
Yours very truly,

C.S.I. HYDROSTATIC TESTERS, INC.

Ronald J. Savoy, P.E.
Vice-President

STATE OF LOUISIANA
RONALD J. SAVOY
REG. NO. 6636
REGISTERED
PROFESSIONAL
ENGINEER
IN
CIVIL ENGINEERING

RJS/mbg



SOUTHERN FLOW
SUPERIOR CHARTS

8 "

METER NUMBER

TUBE & ORIF SIZE

TIME PUT ON
8:30 PM

TIME TAKEN OFF
7:10 AM

DATE PUT ON
8/17/1979

DATE TAKEN OFF
8/18/1979

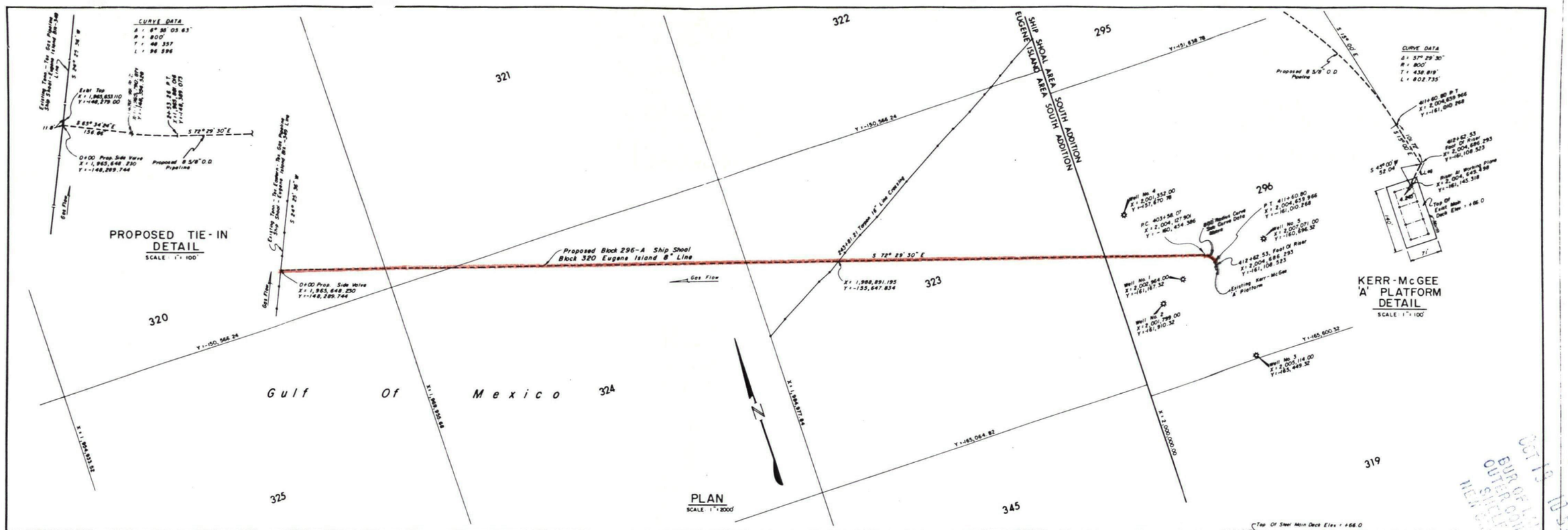
S/S 296-A

MW-MP 150

SIGNED TEXAS GAS

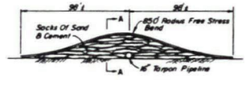
Air Temp

Dan McAvoy GSI

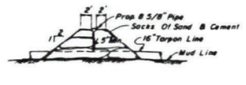


PLAN
SCALE 1" = 2000'

PROFILE
SCALE 1" = 2000' Hor.
1" = 40' Ver.



TARPON CROSSING
NOT TO SCALE



TARPON CROSSING
SECTION A-A
NOT TO SCALE

BEST AVAILABLE COPY

REFERENCE: 79-JEC-3 Engineering & Hazard Study

REV	DATE	DESCRIPTION	BY	CK'D	APP'D
1	6-13-79	Extend Heavy Wall Pipe	J.N.	D.L.J.	
0	2-8-79	Proposed Location	R.M.G.	D.L.J.	

R/W LOCATION DETAILS
MAJOR CONSTRUCTION DATA

DRAWN: R.M.G. | CHECKED: D.L.J. | APP'D | APP'D | FILE NO.

TEXAS GAS TRANSMISSION CORP.
OWENSBORO, KENTUCKY

BLOCK 296-A SHIP SHOAL
BLOCK 320 EUGENE ISLAND 8" LINE

DWG. NO. PL-12517 SH. OF REV. NO. 1

BLOCK 296 "A" - BLOCK 320

SHIP SHOAL - EUGENE ISLAND

REPLACEMENT

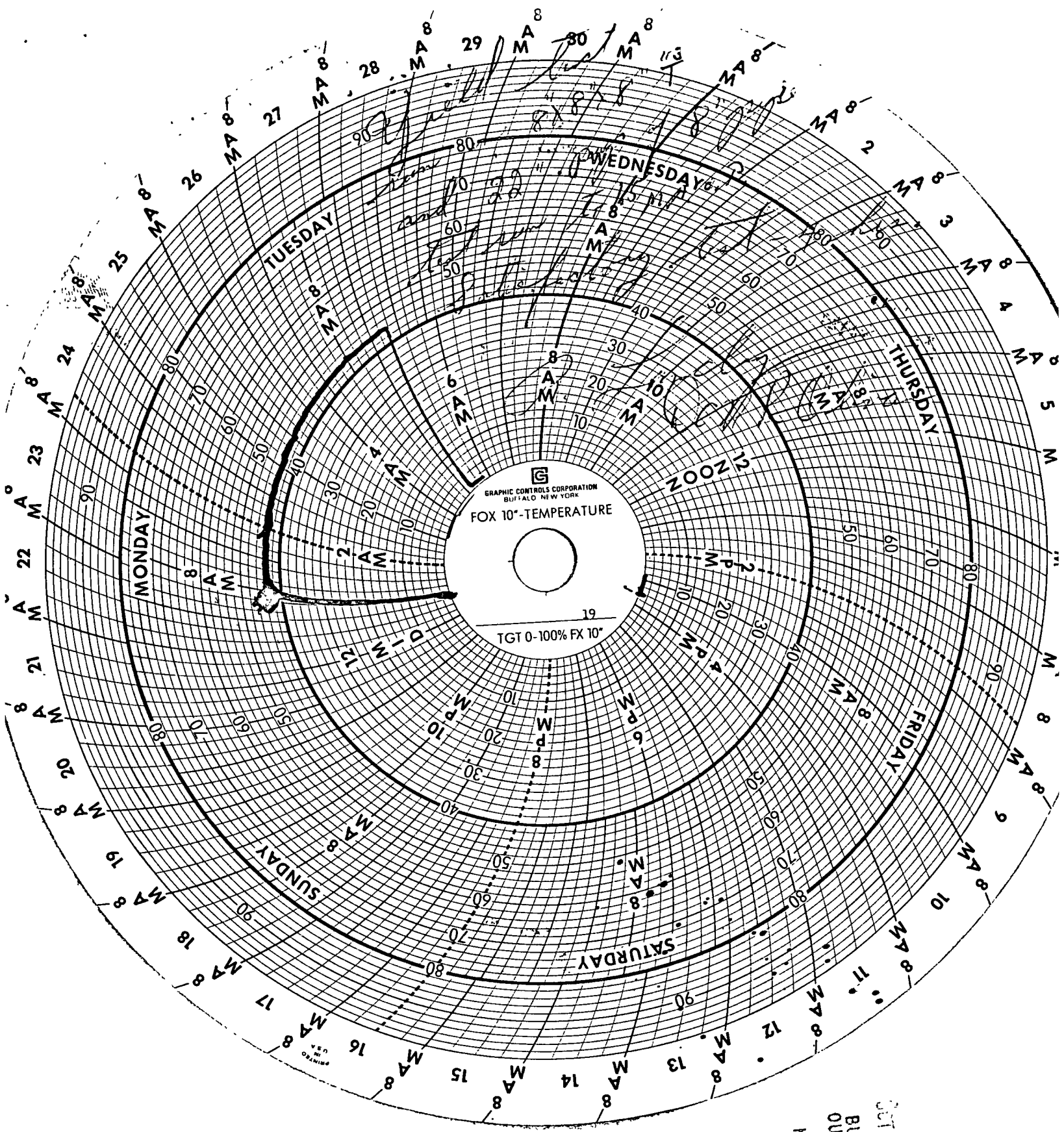
(Fabrication)

A hydrostatic test was conducted on one 8" tee and 22" of 8-5/8" O.D. x 0.500" W.T., Grade B pipe for replacement of an 8" tee found to be laminated on the meter skid platform in St. Mary's Parish, Louisiana.

A test pressure of 2170 psig, based on ANSI-600 valve shell test limits, was maintained for a four-hour period on July 31, 1979.

This was a satisfactory test with no failure. Repressure was required sixteen times due to a leak in a 1/2" plug. Refer to C.O. 21809. Test was conducted at McDermott yard. Refer to PL-12493.

CWS:sld
8-14-79



TEXAS GAS TRANSMISSION CORPORATION

TG-849 R'71

HYDROSTATIC TEST PORT

(Reference: OM&E Procedure Manual, Sections C-2 & E-2)

SLD-25

SECTION TESTED	COUNTY	STATE	FROM (MILEPOST):	TO (MILEPOST):
8" Tee & 8-5/8" Pipe	St. Mary	La.		

LENGTH OF LINE TESTED	O. D. & WALL THICKNESS	MINIMUM SPECIFIED YIELD (OR GRADE)	MANUFACTURER	NEW CONSTRUCTION / EXISTING FACILITY
MILES	IN. × . IN.			NEW CONSTRUCTION [X] EXISTING FACILITY [ ]

FOR FABRICATION AND TESTS OTHER THAN LINE PIPE, DESCRIBE COMPLETELY AND ATTACH SKETCH

Tested 1 - 8" Tee and 22" of 8-5/8" Pipe Gr B .500" W.T.

(used to replace 8" Tee found laminated.)

BLOCK 296 "A" - Block 320 (Ship Shoal - Eugene Island)

FILL POINT — NAME	MILEPOST	TIME AND DATE TEST STARTED	TIME AND DATE TEST ENDED
Domestic McDermott yard		1:05 AM 7-31-79 19	5:05 AM 7-31-79 19

LOCATION (MILEPOST)	ELEVATION (FEET)	PRESSURE DESIRED: 100% MIN. SPECIFIED YIELD	PRESSURE DESIRED: 110% MIN SPECIFIED YIELD
AT DEAD WEIGHT GAGE MP			
AT HIGH POINT MP			
AT LOW POINT MP			

BASIS FOR TEST PRESSURE: 1. 5 times MAOP for 4 hours 2175#

TEST RESULTS: Satisfactory

FAILURE INFORMATION. No. of failures this section: None | Has Dot Form F 7100.2 been prepared? YES [ ] NO [ ] If No, WHY?

DEAD WEIGHT RECORDED READINGS

TIME	PRESSURE	TIME	PRESSURE	TIME	PRESSURE	TIME	PRESSURE
1:05 AM	2175	3:23 AM	2170 - 2180				
1:07	2180	3:40	2170 - 2180				
1:09	2170 - 2180	3:57	2170 - 2180				
1:15	2170 - 2180	4:30	2174				
1:18	2170 - 2180	4:38	2170 - 2180				
1:33	2170 - 2180	4:52	2170 - 2180				
1:50	2170 - 2180	5:05	2176				
2:10	2170 - 2180						
2:25	2170 - 2180						
2:35	2170 - 2180						
2:45	2170 - 2180						
3:05	2170 - 2180						

REMARKS: REF CO 21809

WAS REPRESSURE REQUIRED? NO

YES [X] NUMBER OF TIMES 16

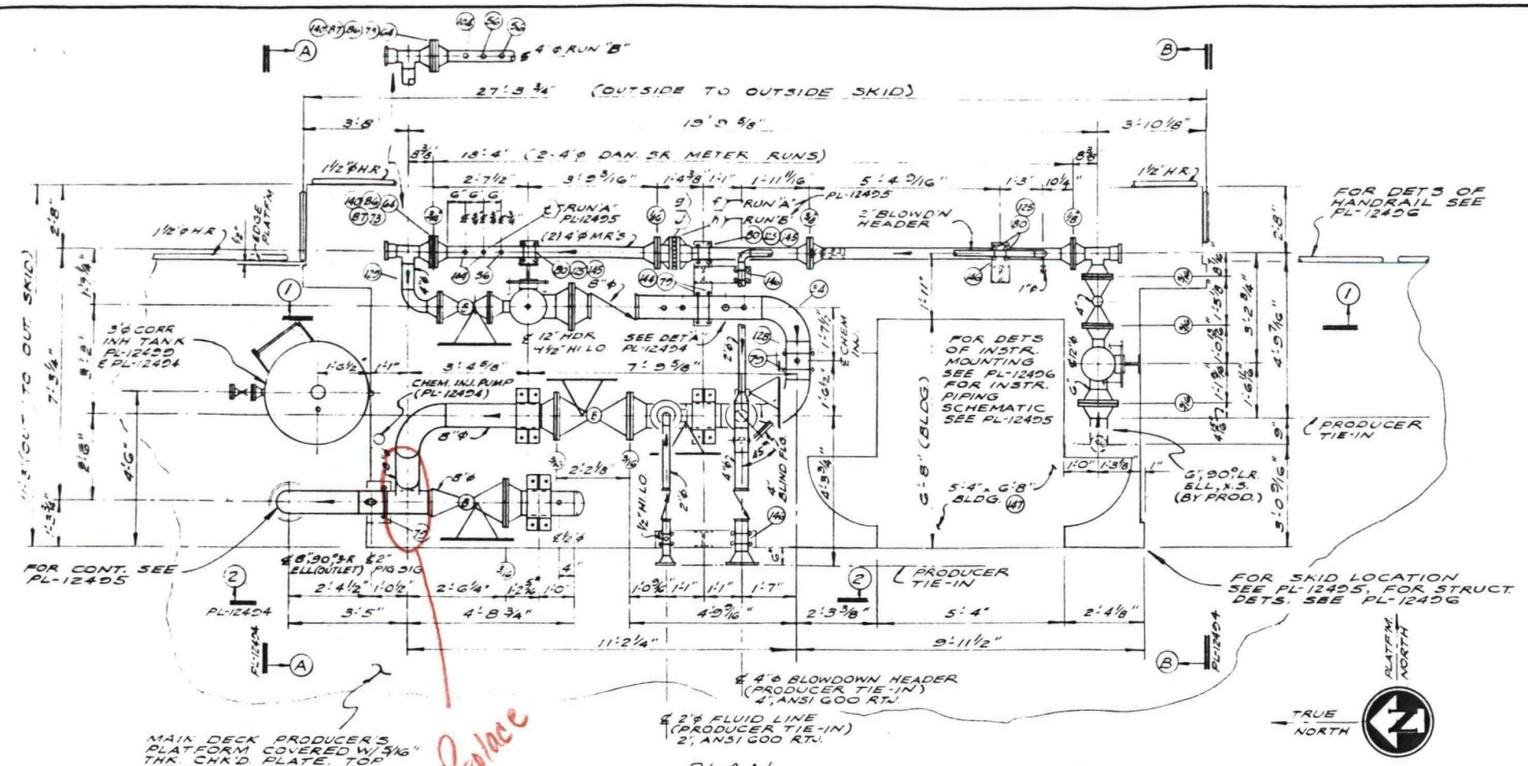
REASON: Slight leak on 1/2" plug, temperature variation

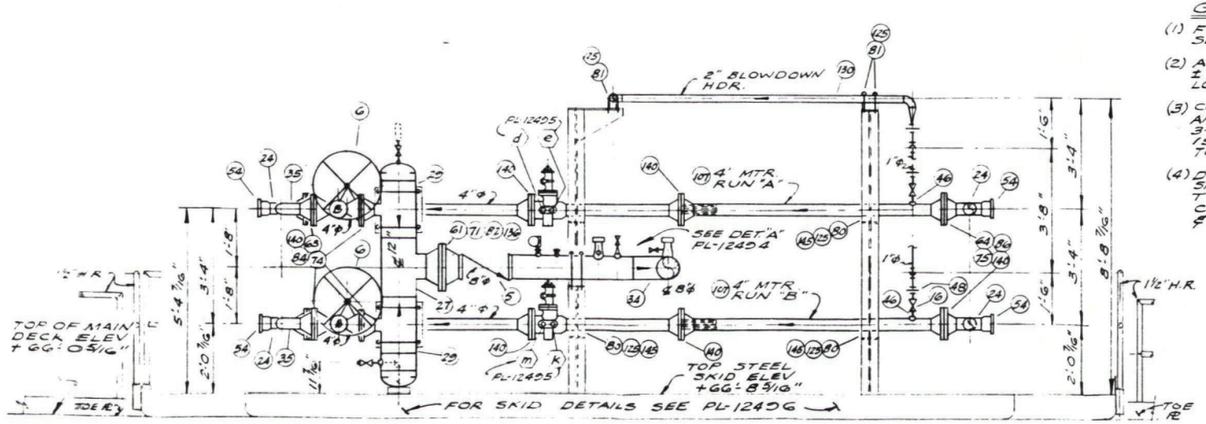
SIGNATURE OF TEXAS GAS REPRESENTATIVE: Richard C. Landry Dick R. Oliver

YIELD TEST RUN BY: Not Run

DISTRIBUTION:
Only an original required. Fill out COMPLETELY and send with Chart and Sketch attached to Systems Engineering, Owensboro.

RETENTION: Permanent





SECTION "1-1"
SCALE: 1/2"=1'-0"

BILL OF MATERIAL

ASSY NO.	QUANTITY	DESCRIPTION	ITEM NO.
7320.08	1	VALVE, BALL, 8"x8"x8", ANSI 600, WE x RTJ, WE TO MAT. .500" WT X-42, ROCKWELL # 6014 TM	2
7303.08	1	VALVE, BALL, 8"x8"x8", ANSI 600, RTJ, ROCKWELL # 6014	3
7310.08	1	VALVE, CHECK, 8", ANSI 600, W.E. TO MAT .500" W.T. X-42 C. WHEATLEY # 100W	5
7304.04	2	VALVE, BALL, 4", ANSI 600, RTJ, CAMERON #300604-2-1	6
"	2	VALVE, BALL, 4", ANSI 600, WE x RTJ, WE TO MAT. .337" WT, GR. B, CAMERON #300605-2-1	8
"	2	VALVE, PLUG, 4", ANSI 600, RTJ, WR. OPER. ELASTOSEAL ROCKWELL # 610	10
"	1	VALVE, CHECK, 4", ANSI 600, WE TO MAT. .337" WT. WHEATLEY # 104 W	12
7310.02	1	VALVE, CHECK, 2", ANSI 600, WE TO MAT. .218" W.T. TOM WHEATLEY # CG	14
"	1	VALVE, BALL, 2", ANSI 600, RTJ, CAMERON #300604-2-1	15
7360.00	7	VALVE, HAND, 1", 6000# S.S, SCR'D, AND-GWOOD #HV3-S	16
"	1	VALVE, CHECK, ¾", 2000# S.S, SCR'D, WILLIAMS # CVL-12B	17
"	4	VALVE, HAND, ½", 6000# S.S, SCR'D, AND-GWOOD #HV5-4	18
"	45	VALVE, HAND, ¼", 6000# S.S, SCR'D, AND-GWOOD #H15-2	19
"	2	VALVE, RELIEF, ¼" SCR'D. HOKE 6531L4Y SET 275#	20
"	1	VALVE, RELIEF, ¼" SCR'D. HOKE 6531L4Y SET 175#	21
7403.08	1	TEE, WELD, 8"x8"x8", EX STG, GR B ½" SCRAPER BARS	23
7304.00	6	TEE, WELD, 4"x4"x4", EX STG, GR B	24
"	2	TEE, SCR'D, 1"x1"x1", 3000# S.S	25
"	1	TEE, S.W., 1"x1"x1", 3000 # F.S.	26
"	1	TEE, RED OUT, WELD, 12"x12"x8", EX STG, GR X-42	27
"	1	TEE, RED OUT, WELD, 12"x12"x6", EX STG, GR X-42	28
"	4	TEE, RED OUT, WELD, 12"x12"x4", EX STG, GR X-42	29
"	2	TEE, RED OUT, WELD, 8"x8"x4", EX STG, GR B	30
"	1	TEE, RED OUT, WELD, 4"x4"x2", EX STG, GR B	31
7403.08	3	ELL, WELD, 8", 90°, S-R, EX STG, GR B	32
"	2	ELL, WELD, 8", 45°, S-R, EX STG, GR B	33
7311.08	3	ELL, WELD, 8", 90°, LR, EX STG, GR B	34
7304.08	2	ELL, WELD, 4", 90°, LR, EX STG, GR B	35
"	2	ELL, WELD, 2", 90°, LR, EX STG, GR B	36
"	3	ELL, S.W., 1", 90°, 3000 # F.S.	37
"	2	ELL, SCR'D, 1", 90°, 3000 # S.S.	38
"	2	REDUCER, CONC, WELD, 4"x2", EX STG, GR B	39
"	1	SWAGE, 2"x1", 3000# F.S (BLE x PSE)	40
"	1	SWAGE, 1"x½", 3000# S.S. (T B E)	41
"	8	SWAGE, ½"x¼", 3000# S.S. (T B E)	42
"	1	BUSHING, SCR'D, 1"x¾", 3000# S.S	43
"	1	BUSHING, SCR'D, 1"x½", 3000# S.S.	44
"	1	BUSHING, SCR'D, 1"x¼", 3000# S.S.	45
"	7	NIPPLE, 1"ø x 2" LG, SCH. 80, S.S., (T B E.)	46
"	3	NIPPLE, ½"ø x 2" LG, SCH 80, S.S., (T B E)	47
"	3	UNION, S.W., 1", 3000# F.S.	48
"	2	THREAD-O-LET, 1" ON 8", 3000# F.S.	49
"	1	THREAD-O-LET, ¾" ON 8", 3000# F.S.	50
"	3	COUPLING, SCR'D, ½", 3000# F.S.	51
"	4	BLANKING CAP, 4", ANSI 600, 2 PC, L/HINGE END TO MAT. .337 W.T. W/ PRESS ALERT VALVE, YALE FIG 500	54
"	4	PLUG, SCR'D, 1", 3000# S.S., HEX. HD.	55
"	3	PLUG, SCR'D, ¾", 3000# S.S.; HEX. HD.	56
"	2	PLUG, SCR'D, ½", 3000# S.S.; HEX. HD.	57
"	3	PLUG, SCR'D, ¼", 3000# S.S.; HEX. HD.	58
"	4	CAP, WELD, 12", EX STG, GR X-42	59
7311.08	1	CAP, WELD, 8", EX STG, GR. B	60
7311.08	5	FLANGE, 8", ANSI 600, W.N., RTJ, BORE 7.63"	61
7304.00	2	FLANGE, 6", ANSI 600, W.N., RTJ, BORE 5.76"	62
"	12	FLANGE, 4", ANSI 600, W.N., RTJ, BORE 5.53"	63
"	4	FLANGE, 4", ANSI 600, W.N., R.F., BORE 3.93"	64
7302.02	4	FLANGE, 2", ANSI 600, W.N., RTJ, BORE 1.94"	65
7304.00	1	FLANGE, BLIND, 4" ANSI 600 RTJ	66
7302.02	1	FLANGE, BLIND, 2" ANSI 600 RTJ TAPPED ½"	67
7335.01	1	SADDLE, WELD, 3" ON 8"	68
7304.00	2	SADDLE, WELD, 1" ON 12"	69

B/M CONT. ON PL-12494

GENERAL NOTES:

(1) FOR SKID & SUPPORT MEMBERS PAINT SPECS. SEE PL-1240G.

(2) ALL PIPE TO BE WRAPPED WITH NEOPRENE 1¼" THICK WHERE STRAPS OR U-BOLTS ARE LOCATED.

(3) CONTRACTOR TO SANDBLAST PIPE TO WHITE METAL AND APPLY PRIMER COAT OF CARBOLINE CARBO ZINC 11, 3-5 MILS THICK; INTERMEDIATE COAT OF CABOLINE 190 H.B. 4 TO 6 MILS THICK; AND CARBOLINE 1234 TOP COAT 4 MILS THICK.

(4) DAMAGED COATING ON PRODUCER'S PLATFORM SHALL BE REPAIRED BY CONTRACTOR WITH TYPE OF COATING SPECIFIED BY PRODUCER. CONTRACTOR SHALL FURNISH COATING MATERIAL & APPLY ACCORDING TO MFG'S. SPECIFICATIONS.

PL-1240G STRUCT SKID PLAN
PL-12494 PIPING DETS SH 1
PL-12495 PIPING DETS SH 2
REFERENCE DRAWINGS

TEXAS GAS TRANSMISSION CORPORATION
Owensboro, Kentucky

BLOCK 296A SHIP SHOAL-
BLOCK 320 EUGENE ISLAND 8" LINE
BLOCK VALVE & P.M.S.
PIPING
PLAN & DETAILS
OFFSHORE LOUISIANA

REV.	DATE	DESCRIPTION	BY	CHK'D	APP'D	APP'D
1	6-15-79	REVD. PROP 1573 CONST C.O. 21805 (MATERIAL)	M C G	A S		
0	4-11-79	PROP 1573 CONST C.O. 21805	M C G	H. M.		

SCALE SHOWN | DATE 4-11-79
DRAWN BY M C G | APPROVED BY
CHECKED BY H M | APPROVED BY
ORIGINAL | LOC. NO. | ENGR. DEPT
DWG. NO. PL-12493 | REV NO. 1

ISSUE DATE: 6-15-79

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BLOCK 296A - SHIP SHOAL AREA

METER AND RISER AND SUBSEA FABRICATION

2" TO 16"

A hydrostatic test was conducted on the meter and riser subsea fabrication for the Block 296A, Ship Shoal Area construction, Offshore Louisiana.

A test pressure of 2170 psig, based on ANSI-600 valve shell test limits, was maintained for an eight-hour period on July 7, 1979.

This was a satisfactory test with no failure. Test was conducted by C.S.I. Hydrostatic Testers at McDermott Yard, Bayou Boeuf, Louisiana. Refer to C.O. 21809. Pipe tested was 2" to 16", Grade B.

CWS:sld
7-17-79

A Hargett Company

July 9, 1979

Mr. Mike Lam
J. RAY MCDERMOTT & COMPANY, INC.
P.O. Drawer 38
Harvey, LA 70059

RE: TEXAS GAS
METER AND RISER SUBSEA FABRICATION
SHIP SHOAL 296A
CO 21809

Dear Mr. Lam:

We have carefully reviewed and evaluated all data assembled from the hydrostatic test on TEXAS GAS' subject line.

Upon completion of the fill of the line, a hydrostatic test was performed using approved engineering practices and procedures. Information detailed on the required test forms show conclusively that the pipeline is as safe as today's technology can produce.

From the test results it is concluded that TEXAS GAS has used the latest advanced scientific developments in the field of hydrostatic testing in compliance with all current state and federal safety regulations.

Yours very truly,

C.S.I. HYDROSTATIC TESTERS, INC.

Ronald J. Savoy, P.E.
Vice-President

RJS/mbg

STATE OF LOUISIANA
RONALD J. SAVOY
REG. NO. 6636
REGISTERED
PROFESSIONAL
ENGINEER
IN
CIVIL ENGINEERING

CSI Hydrostatic Testers, Inc.
P.O Box 51282 Lafayette, Louisiana 70505 Phone 318/235-7567

C. S. I. HYDROSTATIC TESTERS

Hydrostatic Test Report

BOX 51282, O.C.S. LAFAYETTE, LA. 70505

Company Texas Gas

Line Meter & Riser Subsea Fab. Location Blk. 296A SS Job No. CO 21809 Length _____ ft.

Line Size 2"-16" O.D. _____ W.T. Gr. B Sta/M.P. _____ to Sta/M.P. _____

Terrain _____ Soil Condition _____

Fill began _____ at _____ A.M. P.M. Fill Completed _____ at _____ A.M. P.M.

Meter Reading: Beginning _____ Gals., Final _____ Gal.

Displacement: Theoretical _____ Gal., Meas. _____ Gal.

Gallons Required to increase pressure from _____ P.S.I.G. to _____ P.S.I.G. _____ Gal.
PRESSURE PUMP MEASUREMENT

Exposed pipe 100% _____ ft. General Contractor J. RAY MCDERMOTT & COMPANY, INC.

Fill water Temperature

TIME		Deadweight Pressure	TEMPERATURE OF			REMARKS
Date	Hour		Air	Pipe	Remote Earth	
7/7/79	6:50AM					Began Pressuring
		Repair leaks in valve body Change valve on assembly				
	9:40	-0-				Began pressuring
	9:50	2175				At test pressure
	9:55	2180-2170	79			Bled 10 PSI
	10:00					Bled 20 PSI repair leak
	10:05	2175				At test pressure
	10:15	2180-2170	86			Bled 10 PSI
	10:30	2178	85			
	10:35	2180-2170				Bled 10 PSI
	10:41	2180-2170				Bled 10 PSI
	10:45	2180-2170	87			Bled 10 PSI
	10:53	2180-2170				Bled 10 PSI
	11:00	2180-2170	80			Bled 10 PSI
	11:07	2180-2170				Bled 10 PSI
	11:15	2180-2170	92			" " "
	11:21	2180-2170				" " "
	11:26	2180-2170				" " "
	11:30	2178	93			
	11:33	2180-2170				Bled 10 PSI
	11:40	2180-2170				
	11:47	2180-2170				

CSI Engineer Gary Barmore

Witness 1 _____

2 _____

Field Approval for Pipeline Company

Insp. E. Z. Williams

Chief Insp. _____

C. S. I. HYDROSTATIC TESTERS

Hydrostatic Test Report

P. O. BOX 51282, O.C.S. LAFAYETTE, LA. 70505

Meter & Riser
Line Subsea Fab. Location SS Blk 296A Job No. CO 21809 Length ft.

Line Size 2" - 16" O.D. W.T. Gr. B Sta/M.P. to Sta/M.P.

TIME		Dead Weight Pressure	TEMPERATURE OF			REMARKS
DATE	HOUR		Air	Pipe	Remote Earth	
7/7/79	11:55AM	2180-2170				Bled 10 PSI
	12:00	2175	92			
	12:09PM	2180-2170				Bled 10 PSI
	12:30	2179	89			
	12:33	2180-2170				Bled 10 PSI
	12:40	2180-2170				" " "
	12:45	2180-2170				" " "
	12:52	2180-2170				" " "
	1:00	2180-2170	88			" " "
	1:12	2180-2170				" " "
	1:17	2180-2170				" " "
	1:19	2180-2170				" " "
	1:24	2180-2170				" " "
	1:30	2180-2170	92			" " "
	1:40	2180-2170				" " "
	1:47	2180-2170				" " "
	2:00	2174	92			(Cloudy overcast)
	2:18	2170-2180				Repressured
	2:26	2170-2180				" "
	2:30	2170-2180	88			" "
	2:37	2170-2180				" "
	2:45	2170-2180				" "
	2:57	2170-2180				" "
	3:00	2173	88			
	3:06	2170-2180				Repressured
	3:17	2170-2180				" "
	3:28	2170-2180				" "
	3:30	2180	85			
	3:43	2170-2180				Repressured
	3:52	2170-2180				" "
	4:00	2170-2180	84			Started raining Repressured
	4:05	2170-2180				Repressured
	4:07	2170-2180				" "
	4:10	2170-2180				" "
	4:12	2170-2180				" "
	4:14	2170-2180				" "

CSI Engineer Gary Barmore

Witness 1

2

Field Approval for Pipeline Company

Insp E. Z. Williams

Chief Insp.

C. S. I. HYDROSTATIC TESTERS

Hydrostatic Test Report

P. O. BOX 51282, O.C.S. LAFAYETTE, LA. 70505

Meter & Riser
Line Subsea Fab. Location SS Blk 296A Job No. CO21809 Length _____ ft.

Line Size 2" - 16" O.D. _____ W.T. Gr. B Sta/M.P. _____ to Sta/M.P. _____

TIME		Dead Weight Pressure	TEMPERATURE OF			REMARKS
DATE	HOUR		Air	Pipe	Remote Earth	
7/7/79	4:16PM	2170-2180				Repressured
	4:17	2170-2180				" "
	4:20	2170-2180				" "
	4:22	2170-2180				" "
	4:24	2170-2180				" "
	4:26	2170-2180				" "
	4:28	2170-2180				" "
	4:30	2170-2180	80			" "
	4:34	2170-2180				" "
	4:38	2170-2180				" "
	4:44	2170-2180				" "
	5:00	2171	80			" "
	5:02	2170-2180				" "
	5:19	2170-2180				" "
	5:30	2173	80			" "
	5:35	2170-2180				" "
	5:47	2170-2180				" "
	6:00	2174	80			
	6:05	2170-2180				" "
	6:08	2167	80			Off test Bled down

CSI Engineer Gary Barmore

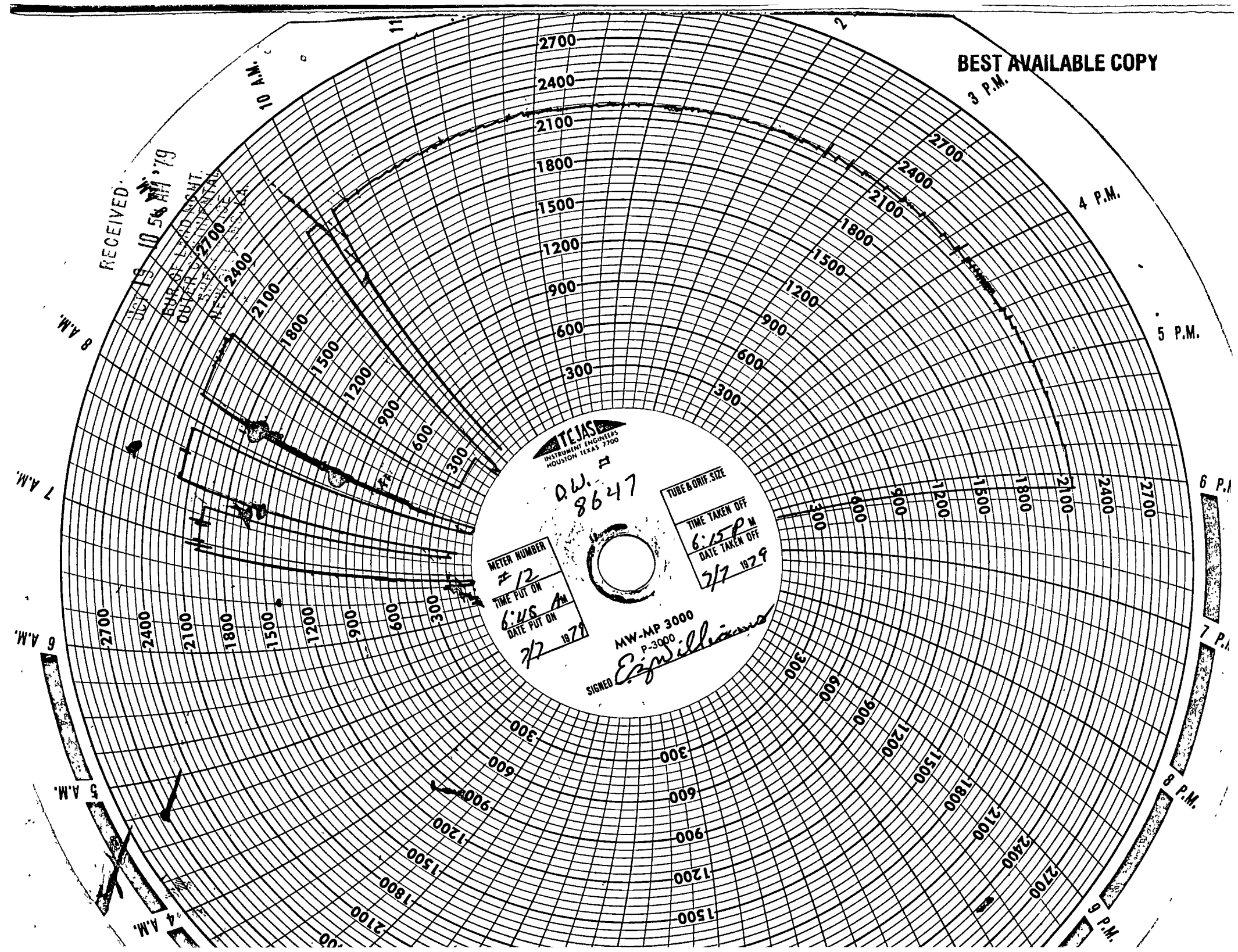
Witness 1 _____

2 _____

Field Approval for Pipeline Company

Insp. E. Z. Williams

Chief Insp. _____



TEJAS
INSTRUMENT ENGINEERS
HOUSTON, TEXAS 77001

Pipe Temp.

METER NUMBER	TUBE & ORIF SIZE
TIME PUT ON: 6:45 AM	TIME TAKEN OFF: 6:30 PM
DATE PUT ON: 7/1 1979	DATE TAKEN OFF: 7/1 1979

MW-MP 150 -

SIGNED E.J. Williams

HYDROSTATIC TEST PIPING LAYOUT

DALE CASSIDY
7-5-79

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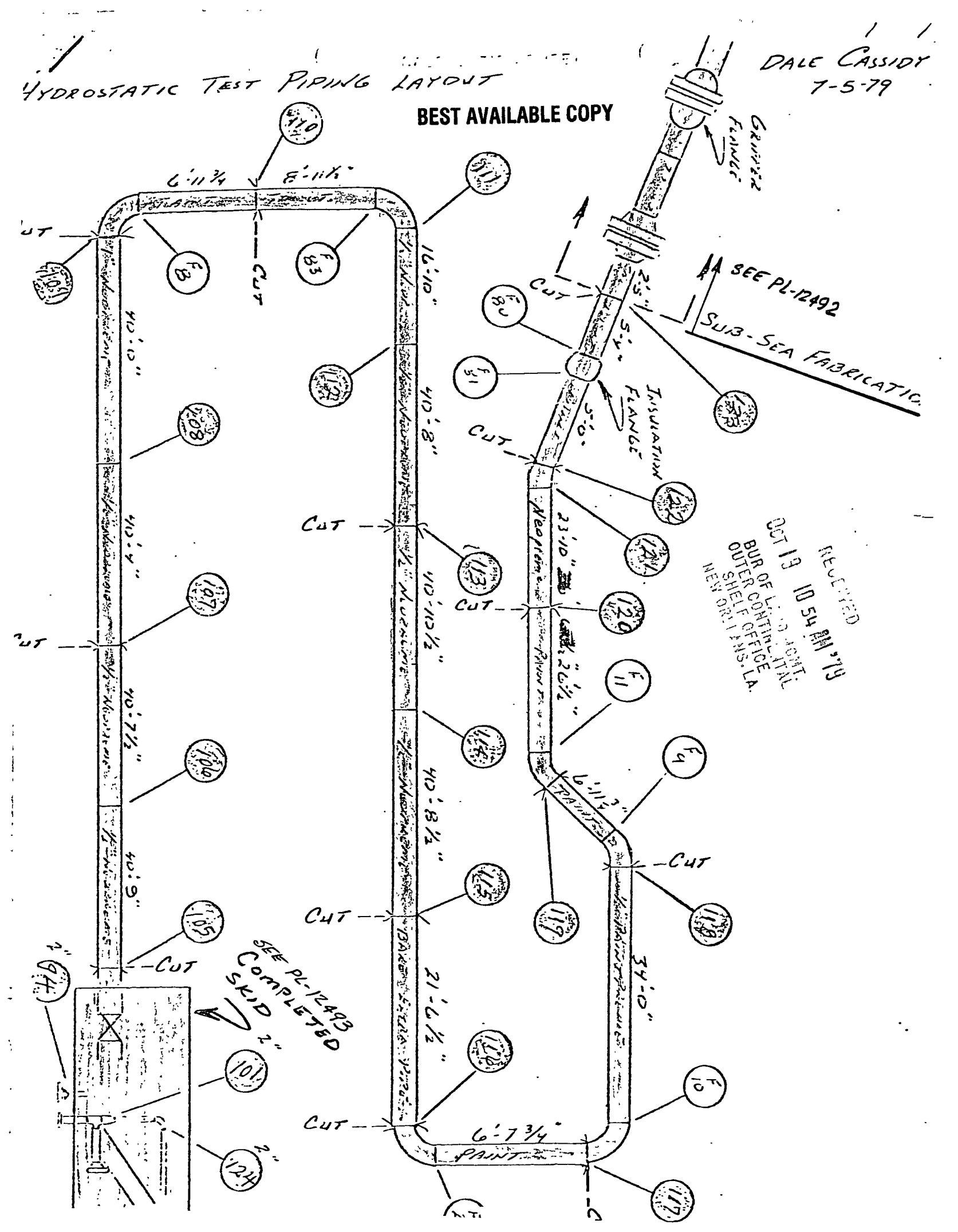
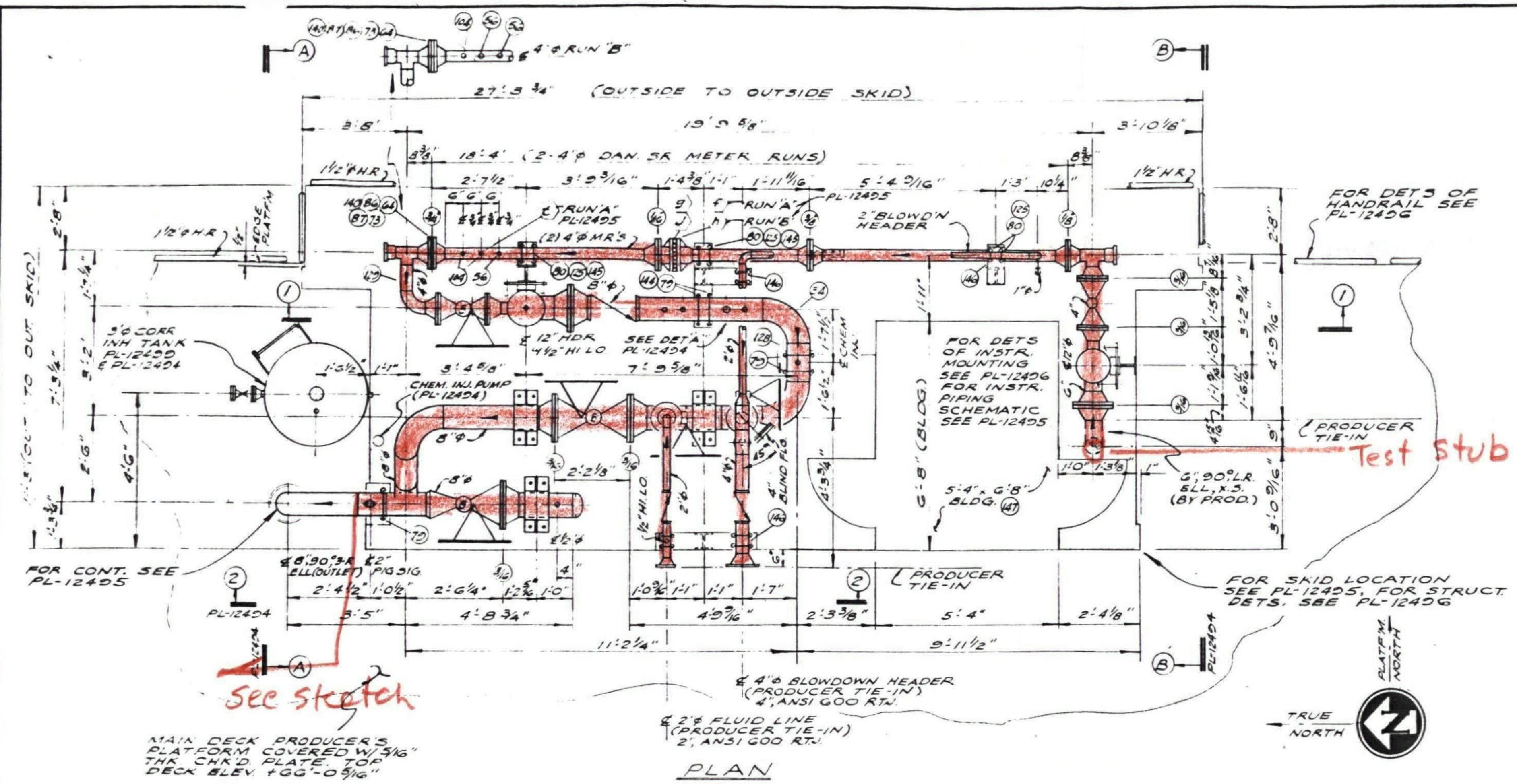
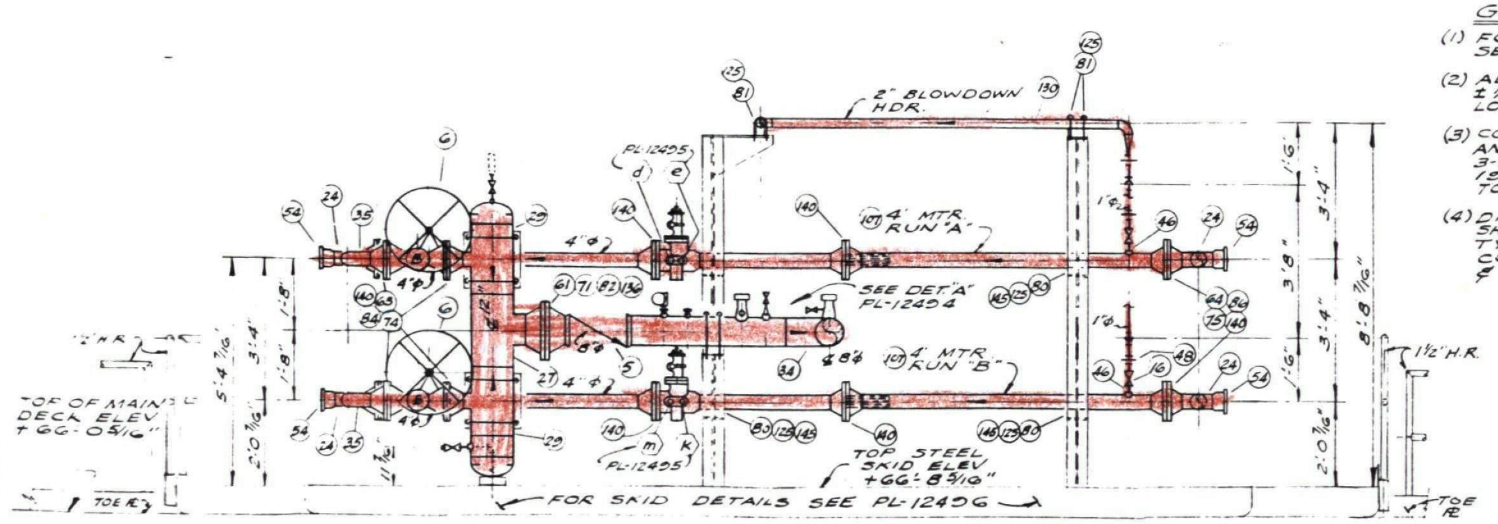




PLAN

SCALE: 1/2"=1'-0"



SECTION "1-1"

SCALE: 1/2"=1'-0"

BEST AVAILABLE COPY

BILL OF MATERIAL

ACC'T NO.	QUANTITY	DESCRIPTION	ITEM NO.
920.08	1	VALVE, BALL, 8"x8"x8", ANSI 600, WE x RTJ, W.E. TO MAT. .500" WT X-42, ROCKWELL #6914 TM	2
733.08	1	VALVE, BALL, 8"x8"x8", ANSI 600, RTJ, ROCKWELL # 69TM	3
920.08	1	VALVE, CHECK, 8", ANSI 600, W.E. TO MAT. .500" W.T. X-42 C. WHEATLEY # 100W	5
920.04	2	VALVE, BALL, 4", ANSI 600, RTJ., CAMERON #800604-2-1	6
"	2	VALVE, BALL, 4", ANSI 600, WE x RTJ, WE TO MAT. .337" W.T., GR.B, CAMERON #800605-2-1	8
"	2	VALVE, PLUG, 4", ANSI 600, RTJ, WR. OPER. ELASTOSEAL ROCKWELL #G101	10
"	1	VALVE, CHECK, 4", ANSI 600, W.E. TO MAT. .337" W.T. WHEATLEY FIG #8	12
920.02	1	VALVE, CHECK, 2", ANSI 600, W.E. TO MAT. .218" W.T. TOM WHEATLEY # 66	14
"	1	VALVE, BALL, 2", ANSI 600, RTJ., CAMERON #800604-2-1	15
534.00	7	VALVE, HAND, 1", 6000# S.S., SCR'D., AND-G'WOOD #HIVS-8	16
"	1	VALVE, CHECK, 3/4", 2000# SS, SCR'D, WILLIAMS #CVL-12B	17
"	4	VALVE, HAND, 1/2", 6000# SS, SCR'D, AND.-G'WOOD #HIVS-4	18
"	45	VALVE, HAND, 1/4", 6000# SS, SCR'D, AND-G'WOOD #HIS-2	19
"	2	VALVE, RELIEF, 1/4" SCR'D. HOKE 6532L4Y SET 275#	20
"	1	VALVE, RELIEF, 1/4" SCR'D. HOKE 6534L4Y SET 175#	21
683.08	1	TEE, WELD, 8"x8"x8", EX. STG., GR.B W 1/2" SCRAPER BARS	23
534.00	6	TEE, WELD, 4"x4"x4", EX STG, GR. B	24
"	2	TEE, SCR'D, 1"x1"x1", 3000# S.S.	25
"	1	TEE, S.W., 1"x1"x1", 3000# F.S.	26
"	1	TEE, RED. OUT, WELD, 12"x12"x8", EX. STG., GR X-42	27
"	1	TEE, RED. OUT, WELD, 12"x12"x6", EX. STG, GR. X-42	28
"	4	TEE, RED. OUT, WELD, 12"x12"x4", EX. STG, GR. X-42	29
"	2	TEE, RED. OUT, WELD, 8"x8"x4", EX. STG, GR. B	30
"	1	TEE, RED. OUT, WELD, 4"x4"x2", EX. STG, GR. B	31
683.08	3	ELL, WELD, 8", 90°, 3-R, EX. STG., GR. B	32
"	2	ELL, WELD, 8", 45°, 3-R, EX. STG., GR. B	33
683.08 534.00	3	ELL, WELD, 8", 90°, LR., EX STG, GR. B	34
534.00	2	ELL, WELD, 4", 90°, L.R., EX STG., GR. B	35
"	9	ELL, WELD, 2", 90°, L.R., EX. STG, GR. B	36
"	3	ELL, S.W., 1", 90°, 3000# F.S.	37
"	2	ELL, SCR'D, 1", 90°, 3000# S.S.	38
"	2	REDUCER, CONC., WELD, 4"x2", EX. STG, GR. B	39
"	1	SWAGE, 2"x1", 3000# F.S. (BLE x PSE)	40
"	1	SWAGE, 1"x1/2", 3000# S.S. (T.B.E.)	41
"	8	SWAGE, 1/2"x1/4", 3000# S.S. (T.B.E.)	42
"	1	BUSHING, SCR'D, 1"x3/4", 3000# S.S.	43
"	1	BUSHING, SCR'D, 1"x1/2", 3000# S.S.	44
"	1	BUSHING, SCR'D, 1"x1/4", 3000# S.S.	45
"	7	NIPPLE, 1"φ x 2" LG, SCH. 80, S.S., (T.B.E.)	46
"	3	NIPPLE, 1/2"φ x 2" LG, SCH. 80, S.S., (T.B.E.)	47
"	3	UNION, S.W., 1", 3000# F.S.	48
"	2	THREAD-O-LET, 1" ON 8", 3000# F.S.	49
"	1	THREAD-O-LET, 3/4" ON 8", 3000# F.S.	50
"	3	COUPLING, SCR'D, 1/2", 3000# F.S.	51
"	4	BLANKING CAP, 4", ANSI 600, 2 PC., L/HINGE END TO MAT. .337" W.T. W/ PRESS ALERT VALVE, YALE FIG 500	54
"	4	PLUG, SCR'D, 1", 3000# S.S., HEX. HD.	55
"	3	PLUG, SCR'D, 3/4", 3000# S.S., HEX. HD.	56
"	2	PLUG, SCR'D, 1/2", 3000# S.S., HEX. HD.	57
"	9	PLUG, SCR'D, 1/4", 3000# S.S., HEX. HD.	58
"	4	CAP, WELD, 12", EX STG, GR X-42	59
920.08	1	CAP, WELD, 8", EX. STG, GR. B	60
534.00 683.08	5	FLANGE, 8", ANSI 600, W.N., RTJ., BORE 7.63"	61
534.00	2	FLANGE, 6", ANSI 600, W.N., RTJ., BORE 5.76"	62
"	12	FLANGE, 4", ANSI 600, W.N., RTJ., BORE 3.83"	63
"	4	FLANGE, 4", ANSI 600, W.N., R.F., BORE 3.83"	64
920.02	4	FLANGE, 2", ANSI 600, W.N., RTJ., BORE 1.94"	65
534.00	1	FLANGE, BLIND, 4" ANSI 600 RTJ.	66
920.02	1	FLANGE, BLIND, 2" ANSI 600 RTJ TAPPED 1/2"	67
683.08	1	SADDLE, WELD, 3" ON 8"	68
534.00	2	SADDLE, WELD, 1" ON 12"	69

B/M CONT. ON PL-12494

GENERAL NOTES:

(1) FOR SKID & SUPPORT MEMBERS PAINT SPECS. SEE PL-12496.

(2) ALL PIPE TO BE WRAPPED WITH NEOPRENE 1/4" THICK WHERE STRAPS OR U-BOLTS ARE LOCATED.

(3) CONTRACTOR TO SANDBLAST PIPE TO WHITE METAL AND APPLY PRIMER COAT OF CARBOLINE CARBO ZINC 11, 3-5 MILS THICK; INTERMEDIATE COAT OF CABOLINE 190 H.B. 4 TO 6 MILS THICK; AND CARBOLINE 1294 TOP COAT 4 MILS THICK.

(4) DAMAGED COATING ON PRODUCERS PLATFORM SHALL BE REPAIRED BY CONTRACTOR WITH TYPE OF COATING SPECIFIED BY PRODUCER. CONTRACTOR SHALL FURNISH COATING MATERIAL & APPLY ACCORDING TO MFG'S. SPECIFICATIONS.

REFERENCE DRAWINGS

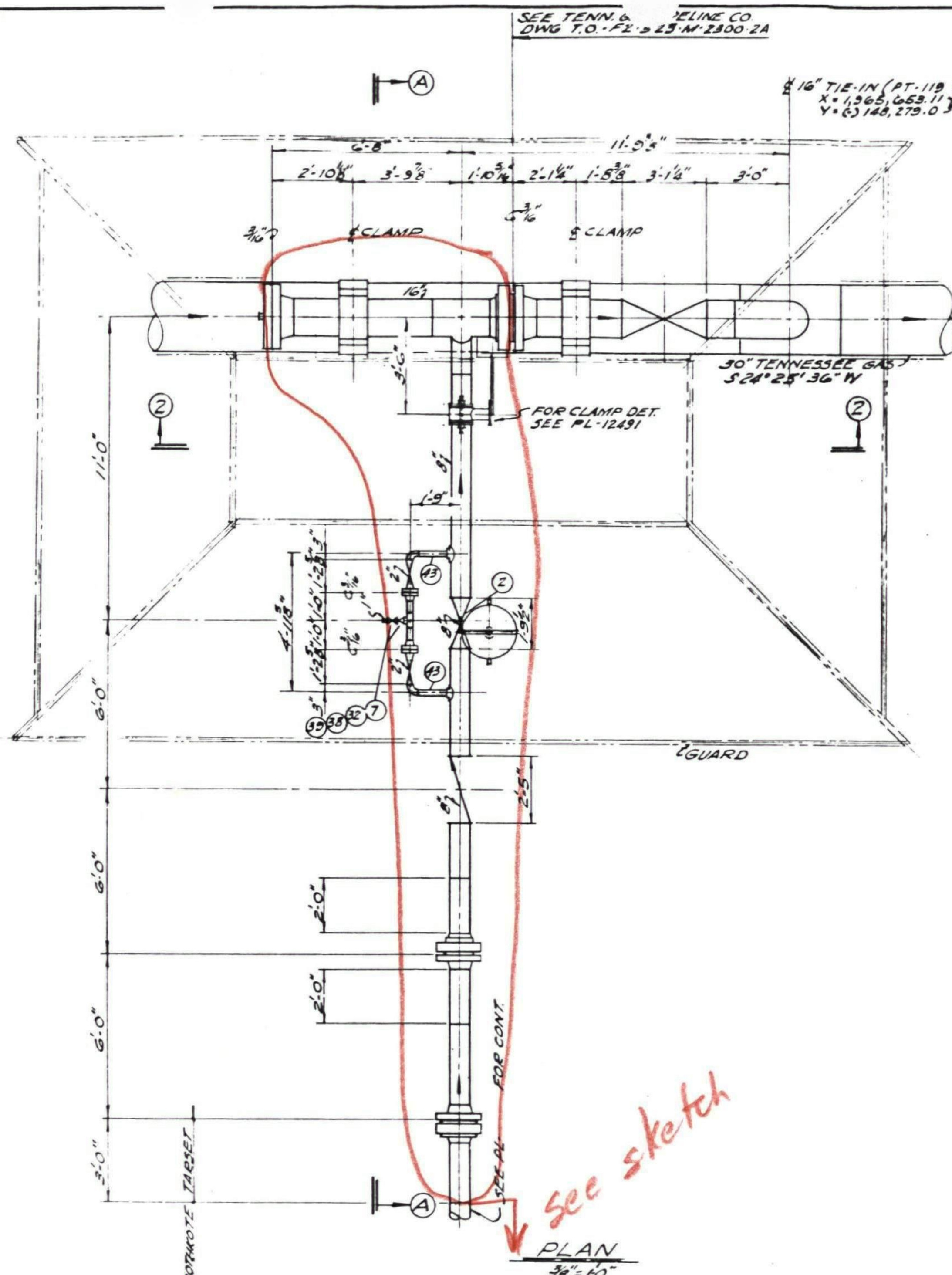
PL-12496 STRUCT. SKID PLAN
PL-12494 PIPING DETS SH 1
PL-12495 PIPING DETS SH 2

TEXAS GAS TRANSMISSION CORPORATION
Owensboro, Kentucky

BLOCK 296A SHIP SHOAL-
BLOCK 320 EUGENE ISLAND 8" LINE
BLOCK VALVE & P.M.S.
PIPING
PLAN & DETAILS
OFFSHORE LOUISIANA

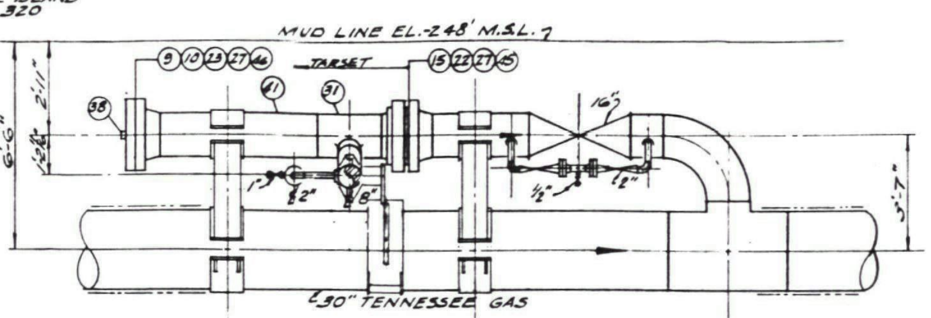
REV.	DATE	DESCRIPTION	BY	CHK'D	APP'D	APP'D
1	6-13-79	REV'D PROP 1979 CONST C.O. 21809 (MATERIAL)	MCG	AS	CB	
0	4-11-79	PROP. 1979 CONST C.O. 21809	MCG	H.M.	CB	

SCALE: SHOWN | DATE: 4-11-79
DRAWN BY: M.C.G. | APPROVED BY: CB
CHECKED BY: HM | APPROVED BY:
ORIGINAL | ENGR. DEPT
LOC. NO.
DWG. NO. PL-12493 | REV. NO. 1
ISSUE DATE: 6-15-79



PLAN

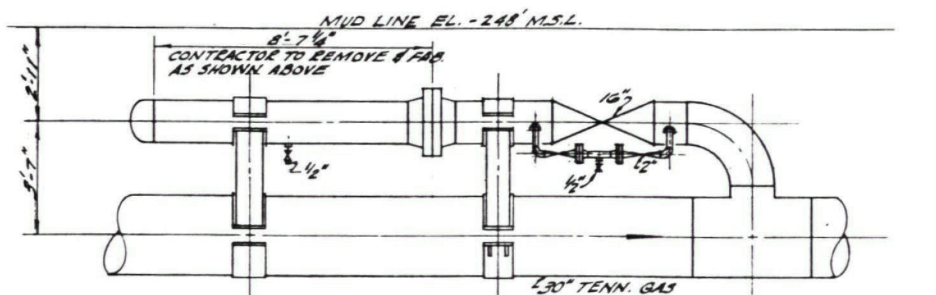
3/8" = 1'-0"



SECTION "2-2"

3/8" = 1'-0"

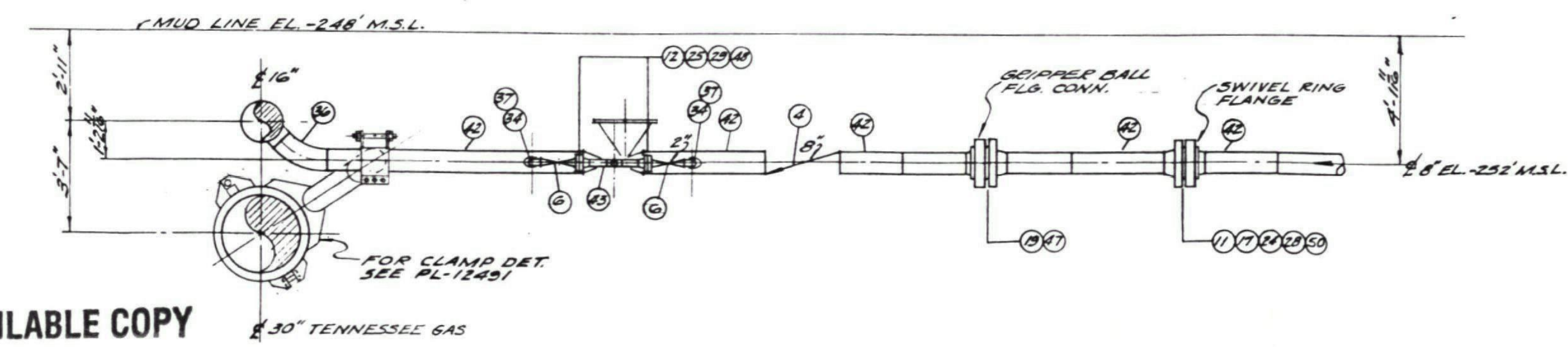
(AFTER CONSTRUCTION)



SECTION "2-2"

3/8" = 1'-0"

(BEFORE CONSTRUCTION)



SECTION "A-A"

3/8" = 1'-0"

BEST AVAILABLE COPY

BILL OF MATERIAL

ACCT. NO.	QUANTITY	DESCRIPTION	ITEM NO.
	1	VALVE BALL 8" 900# ANSI W.E. TO MATCH .500" W.T. GR X-42 PIPE CAMERON 800902-2-1A	2
	1	VALVE CHECK 8" 900# ANSI W.E. TO MATCH .500" W.T. GR.X-42 PIPE TOM WHEATLEY #66	4
	2	VALVE BALL 2" 1500# ANSI R.J. FLG. x W.E. TO MATCH .343" W.T. GR B PIPE CAMERON 801505-1-1A	6
	1	VALVE BALL 1" 3000# WOG SCR'D. JAMESBURY HP-22 GT	7
	1	FLANGE 16" 900# ANSI RJ BLIND TAPPED 1/2" N.P.T.	9
	1	FLANGE 16" 900# ANSI RJ WN. BORE 15.00"	10
	1	FLANGE 8" 900# ANSI RJ WN. BORE 7.625"	11
	2	FLANGE 2" 900# ANSI RJ W.N. BORE 1.69"	12
	1	SWIVEL RING FLANGE 16" 900# ANSI R.J. BORE 15.00" TUBE TURN DWG 90.6061	15
	1	SWIVEL RING FLANGE 8" 900# ANSI R.J BORE 7.625" TUBE TURN DWG 90.6061	17
	1	CONNECTOR 8" 900# ANSI GRIPPER BALL FLG-LOK BORE 7.625" COMPLETE W/(2) 2'-0" PUPS .500" WT, GR X42	19
	20	BOLTS STUD 1 3/8" x 15 1/2" LG. W/2 HEX NUTS EA. CAD. PL'D	22
	20	BOLTS STUD 1 3/8" x 11 3/4" LG. W/2 HEX NUTS EA. CAD. PL'D	23
	12	BOLTS STUD 1 1/8" x 11 1/2" LG. W/2 HEX NUTS EA. CAD. PL'D	24
	16	BOLTS STUD 7/8" x 5 3/4" LG. W/2 HEX NUTS EA. CAD PL'D	26
	2	GASKET OVAL RING 16" 900# ANSI 18 1/2" P.D. R-66	27
	1	GASKET OVAL RING 8" 900# ANSI 10 5/8" P.D. R-49	28
	2	GASKET OVAL RING 2" 900# ANSI 3 1/4" P.D. R-24	29
	1	TEE WELD 16"x16"x8" RED OUTLET EX. STRG. GR X-52	31
	1	TEE WELD 2"x2"x2" SCH 160 .343" WT. GR "B"	32
	2	SADDLE WELD 2" ON 8" GR X-60	34
	1	ELL WELD 8" 45° 3-R EX STRG. GR. B	36
	2	ELL WELD 2" 90° LR .343" WT. GR. B	37
	2	PLUG SCR'D. 1" HEX HD 3000# S.S.	38
	1	SWAGE 2"x1" BLE-T.S.E. SCH 160	39
	6	LIN. FT. PIPE 16" .500" W.T. GR X-52	41
	25	LIN. FT PIPE 8" .500" WT. GR X-42	42
	4	LIN. FT PIPE 2" .343" WT. GR B	43
	1	FLANGE PROTECTOR FOR 16" 900# TUBE TURN LT. WT. SWIVEL RING FLG.	45
	1	FLANGE PROTECTOR FOR 16" 900# FLG. McEVOY 595217	46
	1	FLANGE PROTECTOR FOR 8" 900# FLG. McEVOY 595110	47
	2	FLANGE PROTECTOR FOR 2" 900# FLG. McEVOY 595070	48
	1	FLANGE PROTECTO FOR 8" 900# FLG. TUBE TURN LT. WT. SWIVEL RING FLG.	50

TENN. GAS DWGS.
TO-FZ-523M-2300-2
TO-FZ-523M-2300-2A
PL-12517 R/W

REFERENCE DRAWINGS

TEXAS GAS TRANSMISSION CORPORATION
Owensboro, Kentucky

BLOCK 296A SHIP SHOAL
BLOCK 320 EUGENE ISLAND
8" LINE UNDERWATER CONNECTION
PLAN & SECTIONS
OFFSHORE LA.

REV.	DATE	DESCRIPTION	BY	CHK'D	APP'D	APP'D
0	4-4-79	PROP. 1979 CONST. PER C.O. 21809	H M.	A S		

SCALE 3/8" = 1'-0" — DATE APRIL 4, 1979
DRAWN BY McINTYRE — APPROVED BY
CHECKED BY SWEAT — APPROVED BY
ORIGINAL
LOC. NO.
ENGR. DEPT.
DWG. NO. PL-12492 — REV. NO. 0
ISSUE DATE: 6-1-79

NOTIFICATION OF HYDROSTATIC TEST:

Company representative furnishing following information Ralph Jackson

Telephone Number (502) 926-8686 Date 8-20-79

1. OCS Number G 4027
2. Name of Company Texas Gas Transmission Corp.
3. Size of Pipeline 8 5/8" 7.82 Miles long
4. From where to where Kerr-McGee "A" platform in Block 296 SS A to subseatie with Texas Eastern-Transco Inc-Texas Gas 30" P/L in Block 330 EIA
5. Platform where hydrostatic test instruments will be set up Kerr-McGee 296 "A" platform in Ship Shoal Area
6. Date and time they plan to start 8-17, 1979

Notify: Frank Torres, U.S. Geological Survey, 837-4720, Ext. 237, or leave a message for him. N/A

BLM Employee: Darby J. Bordelon

NOTIFICATION OF CONSTRUCTION:

Company representative furnishing the following information Ralph Jackson

Telephone Number (502) 926-8686 Date 7-11-79

1. OCS Number G 4027
2. Name of Company Texas Gas Transmission Corp.
3. Name of Contractor J. Ray McDermott
4. Name of lay barge #29
5. Size of Pipeline 8⅝ INCH GAS 7.82 miles
6. From where to where Kerr-McGee "A" platform in Block 296, Ship Shoal Area 50' Add to sub-sea tie with Texas Eastern - Tennessee Gas - Texas Gas jointly owned 30-INCH Pipeline in Block 320, Eugene Island Area. 50. Add.
7. Where construction begins and ends (i.e., which platform) Begin @ Kerr-McGee "A" platform in Block 296 Ship Shoal Area and end at sub-sea tie with 30" P/L in Block 320 Eugene Island Area
8. Method of laying Conventional Lay
9. How long barge will be on job 30 day
10. Where heliports are available on lay barge
11. Does the pipeline cross safety fairway(s)? (Go to map for information) NO.

    Where _____

    Initial and teminal points: Initial: X = _____ Y = _____

    Terminal: X = _____ Y = _____

12. When the barge will begin (date) July 17, 1979

Notify: Frank Torres, U. S. Geological Survey, 837-4720, Ext. 237 (Give him items 1-10 & 12)). Date Contacted 7-11-79

Notify only if construction crosses or in close proximity of fairways Chief O'Neil, Petty Officer Lutali, or Chief Flannegan, U. S. Coast Guard, telephone #6236 (upstairs). Give items 1 - 9 & 11 - 12. Date Contacted N/A 7-11-79

Items 1, 2, 5, 6, and 11 can be determined from the file if the company representative doesn't know them. Item 11 should be determined on a map in this office (see Bill Overstreet).

BLM Employee Audrey C. Batton

SN 5389

OS-5

OCS-G 4027

BEST AVAILABLE COPY

Ship Shoal Area,
South Addition
Eugene Island Area,
South Addition

June 5, 1979

Texas Gas Transmission Corporation

Right-of-way

JUN 19 1979

ACTION - APPLICATION APPROVED

Your application for a right-of-way for a proposed 8-inch pipeline from Kerr-McGee Corporation's Platform "A" in Block 296, Ship Shoal Area, South Addition, across Blocks 323, 324, and 321, to a subsea tie-in with an existing Tenneco Inc./Texas Eastern Transmission Corporation/Texas Gas Transmission Corporation jointly owned 30-inch pipeline in Block 320, Eugene Island Area, South Addition, dated March 27, 1979, with attachments is hereby approved with the following additions and corrections:

1. The guidelines for preparation of a pipeline application that are applicable and agreed to by the applicant are dated February 13, 1978.

2. The ANSI 600 valves, flanges, and fittings should not be subjected to a body test greater than 2,175 psig.

The permittee agrees that if any site, structure, or object of historical or archaeological significance should be discovered during the conduct of any operations within the permitted right-of-way he shall report immediately such findings to the Manager, New Orleans OCS Office and make every reasonable effort to preserve and protect the cultural resource from damage until the Manager, New Orleans OCS Office has given directions as to its preservation.

Permittee agrees to comply with all regulations and conditions as may be prescribed by the Secretary of the Interior, or the Secretary of Transportation including, pursuant to section 21(b) of the OCS Lands Act, as amended, provisions to assure maximum environmental protection by utilization of the best available and safest technologies, including the safest practices for pipeline burial. This agreement includes but is not limited to complying with the following stipulations:

1. Permittee shall transport or purchase without discrimination oil or natural gas produced from submerged lands or outer Continental Shelf lands in the vicinity of its pipeline in such proportionate amounts as the Federal Energy Regulatory Commission, in consultation with the Secretary of Energy, may, after a full hearing with due notice thereof to the interested parties, determine to be reasonable, taking into account, among other things, conservation and the prevention of waste.

NOTED—MC INTOSH

2. Permittee shall operate its pipeline in accordance with the competitive principles set out in section 5(f)(1) of the Outer Continental Shelf Lands Act, as amended, except insofar as the Federal Energy Regulatory Commission may, by order or regulation, exempt such pipeline from any or all of the requirements of section 5(f)(1) pursuant to section 5(f)(2) (which permits such exemption of any pipeline or class of pipelines which feeds into a facility where oil and gas are first collected or a facility where oil and gas are first separated, dehydrated, or otherwise processed).

3. Unless so exempted by Federal Energy Regulatory Commission order or regulation, permittee shall operate its pipeline so as to provide open and nondiscriminatory access to both owner and nonowner shippers, and permittee shall comply with any specific conditions which the Secretary of Energy and the Federal Energy Regulatory Commission may require, after consultation with and due consideration given to the views of the Attorney General, to ensure that its pipeline is operated in accordance with the competitive principles set forth in section 5(f)(1).

/s/ John L. Rankin
John L. Rankin, Manager
Date: June 11, 1979

Texas Gas Transmission Corporation
agrees to be bound by the foregoing.

/s/ Richard C. Young
Agent and Attorney-in-Fact

Date: June 7, 1979

cc: Geological Survey, USDI
Office of Pipeline Safety Operations, USDT

United States Department of the Interior

GEOLOGICAL SURVEY

434 IMPERIAL OFFICE BLDG., 3301 N. CAUSEWAY BLVD
P. O. BOX 7944
METAIRIE, LOUISIANA
TEL (504) 837-4720

In Reply Refer To: OS-5

MAY 1 1979

Memorandum

To: Manager, Bureau of Land Management, 841 Hale Boggs Federal Building, 500 Camp Street, New Orleans, Louisiana 70130

From: Conservation Manager, Gulf of Mexico Region

Subject: Texas Gas Transmission Corporation's Pipeline Right-of-Way Application, BLM OCS-G 4027, Reference 2883(210)

We have reviewed the safety features and design specifications for the subject Right-of-Way Application, dated March 27, 1979, in accordance with the MOU dated August 1, 1974. It is for the construction, maintenance, and operation of an 8 5/8-inch gas pipeline 41,300 feet in length from Kerr-McGee Corporation's Platform "A", Ship Shoal Block 296, lease OCS-G 1535, to a subsea tie-in with an existing Tennessee Gas/Texas Eastern/Texas Gas jointly owned 30-inch pipeline in Eugene Island Block 320, lease OCS-G 2609.

Based upon information submitted in the application, the design characteristics of this pipeline are calculated to be as follows:

Pipeline Component	Maximum Allowable Operating Pressure/WP Ratings
Submerged component	3,256 psig
Riser component	2,435 psig
Valves, flanges, fittings	1,440 psig

The hydrostatic pressure test with water will be at 2,175 psig for eight hours. The ANSI 600 valves should not be subjected to a test-pressure differential greater than 1,440 psig. The ANSI 600 valves, flanges, and fittings should not be subjected to a body test greater than 2,175 psig.

Based on these calculations and a maximum allowable operating pressure (MAOP) of 1,440 psig of the receiving 30-inch pipeline (BLM OCS-G 1950-J), we recommend that the MAOP for this pipeline be 1,440 psig and that this

pressure may be exceeded only when hydrostatically pressure-testing the pipeline. We also recommend that valves and taps at the subsea tie-in be provided with a minimum of three feet of cover, either through burial or with sandbags.

The technical aspects of the proposed pipeline are acceptable in accordance with appropriate regulations and standards.

We would appreciate receiving a copy of the plat showing the location of the pipeline as installed.

Lowell S. Hammond

Acting Conservation Manager

UNITED STATES GOVERNMENT

Memorandum

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

4027

IN REPLY REFER TO:
2883 (210)

TO : Conservation Manager
Gulf of Mexico OCS Operations

Date: April 10, 1979

FROM : Manager
New Orleans OCS Office

SUBJECT : Texas Gas Transmission Corporation's Pipeline Right-of-way Application (OCS-G 4027)

In accordance with the memorandum of understanding between the Bureau of Land Management and U. S. Geological Survey signed August 1, 1974, the subject application is attached.

Please review the technical aspects of the proposed pipeline. If you have any questions regarding this matter, please contact Mr. Autry J. Britton of this office.

Attachments
1. Application dated March 27, 1979
2. Drawings No. RS-213, RS-214, RS-215, and RS-216 dated March 23, 1979

NOTED—MC INTOSH

NOTED - PAIZ

DSC-1541-2
Mar. 1974

GAS TRANSMISSION SERVICES DIVISION

3800 Frederica Street
Owensboro, Kentucky 42301
Phone: 502/926-8686

DIVISION OF
TEXAS GAS TRANSMISSION CORPORATION

March 27, 1979

Mr. John L. Rankin
United States Department of the Interior
Bureau of Land Management
New Orleans Outer Continental Shelf Office
Hale Boggs Federal Building
500 Camp Street - Suite 841
New Orleans, Louisiana 70130

Dear Mr. Rankin:

Re: Texas Gas Transmission Corporation - Right of Way
Application for Proposed 8-Inch Pipeline
Ship Shoal Area, South Addition & Eugene Island Area
South Addition
Offshore Louisiana, Gulf of Mexico

Pursuant to the authority granted in Section 5 (c) of the Outer Continental Shelf Lands Act of August 7, 1953 (67 Stat. 464), and in compliance with the regulations contained in Title 43 CFR 2883, Texas Gas Transmission Corporation hereby applies, in duplicate, for a right of way two hundred (200) feet in width to construct, maintain and operate one 8-inch pipeline as shown on the following listed drawings, attached hereto and made a part hereof:

(1) Proposed 8-Inch pipeline route
Archeological, Engineering & Hazard Study
Drawing - Plan Map (2 copies)

(2) Proposed 8-Inch pipeline
Index Map
Drawing No. RS-213 (3 copies)

(3) Proposed 8-Inch pipeline
Right of Way
Drawing No. RS-214 (3 copies)

(4) Proposed 8-Inch pipeline
Profile
Drawing No. RS-215 (3 copies)

(5) Proposed 8-Inch Pipeline
Schematic
Drawing No. RS-216 (2 copies)

This common carrier pipeline will be used for the transportation of natural gas between the "A" Platform of Kerr-McGee Corporation situated in Block 296, Ship Shoal Area, crossing a portion of same; thence crossing portions of Blocks 323, 324, 321 and 320, all in Eugene Island Area, to a 16" underwater side valve on the Tennessee Gas-Texas Eastern-Texas Gas jointly owned 30" pipeline in Block 320, Eugene Island Area, South Addition, Gulf of Mexico.

In compliance with the applicable regulations, a notice of this application, with drawings attached thereto, have been mailed by Certified Mail, Return Receipt Requested, to each lessee or right of way holder whose lease or right of way is affected by this application. Such lessees and right of way holders are identified on Exhibit A, attached hereto. Following our receipt of the Return Receipts, copies thereof will be forwarded to your office.

In accordance with the guidelines dated April 1, 1976, and amendments thereto dated February 1, 1977, Texas Gas Transmission Corporation agrees to the following:

(1) Because the water depth of the entire pipeline exceeds two hundred (200) feet, only the pipeline away from the underwater valve and the platform will be buried.

(2) The proposed 8" pipeline will cross over the existing 16" Tarpon pipeline in Block 323, Eugene Island Area.

An 18" minimum clearance shall be maintained between the two pipelines with cement-sand sacks placed as shown on attached Drawing No. RS-215.

(3) All valves and fittings will be buried to a minimum of one (1) foot below the mud line.

(4) Sensing devices will be installed as shown on the enclosed schematic drawing.

(5) A copy of the Engineering and Hazard Study, made and prepared by John Chance & Associates, Inc., Lafayette, Louisiana, is enclosed.

(6) All changes, additions or deletions to any equipment on the pipeline or platform will be made only after first securing the expressed written approval of your office.

(7) Your office will be notified at least five days prior to commencing construction and will be advised of the construction date, approximate starting time, starting point, name of contractor and barge, availability of heliport facilities and approximate completion time.

(8) Your office will be notified forty-eight (48) hours in advance of the hydrostatic test and will be advised of the location of the pressure recorder and approximate starting time of the test. Hydrostatic test data, including procedure, hold time and results, will be furnished your office within sixty (60) days following the test.

(9) Within ninety (90) days after completion of construction, Texas Gas Transmission Corporation will provide: (1) a geophysical survey report establishing the location of the completed pipeline within an accuracy of ± 100 feet; (2) an as-built map prepared in accordance with the requirements for the map depicting the proposed route reflecting the total length of the line and distance between X and Y coordinates (all in feet) and depicting those points, if any, at which the pipeline is located outside of the right of way and (3) a copy of the diving inspector's report.

(10) Any breaks, leaks, failures or accidents will be reported within twelve (12) hours after each such occurrence as provided for in said guidelines.

Additional Design Criteria Data is as follows:

(1) The length of line between riser and underwater side valve will be 41,300 feet of 7.882 miles.

(2) The line pipe will be 8-5/8" O.D., 0.375" W.T., 33.04 Lbs./Ft., Grade X-52, seamless.

(3) The riser, foreign line crossing, and approach piping will be 8-5/8" O.D., 0.500" W.T., 43.39 Lbs./Ft., Grade X-42, seamless.

(4) The product to be transported by the pipeline is natural gas.

(5) The water depth ranges from 272' at the Kerr-McGee Corporation's "A" Platform to 248' at the existing side connection on the Tennessee Gas-Texas Eastern-Texas Gas 30" pipeline.

(6) The cathodic protection system will be 280 lb. sacrificial zinc bracelet anodes, spaced at 1,000-foot centers.

(a) Anode Spacing Calculations:

1. 2% holidays
2. 5 MA/sq. ft. current density
3. 23.58 lb. zinc consumed per ampere per year
4. 90% zinc efficiency
5. 85% utilization factor
6. 40-yr. life

I req. = (Pi) (D) (L) (.02) (.005)
D = Pipe Diameter
L = Length of line or 1000'

$$\text{Zing req.} = \frac{(40)\ (\text{I req.})\ (\text{wt. loss/amp/yr.})}{(.90)\ (.85)}$$

$$\text{or Zinc} = \frac{(40)\,(Pi)\,(D)\,(L)\,(.02)\,(.005)\,(23.58)}{(.90)\;(.85)}$$

$$= \frac{(40)\,(Pi)\left(\frac{8.625}{(12)}\right)(1000')\,(.02)\,(.005)\,(23.58)}{(.90)\;(.85)}$$

$$= 278.36 \text{ lb. of zinc/1000 ft.}$$

(7) No internal corrosion problems are anticipated; however, a corrosion inhibitor injection system will be installed on the platform should corrosion become a problem in the future.

(8) The line pipe protective coating will be Minnesota Mining and Manufacturing Company, Scotchcote 212, fusion bonded epoxy coating with 12 mil thickness.

(9) Field joints will be coated with Minnesota Mining and Manufacturing Company, Scotchcote 213.

(10) Underwater repairs are to be made with Splash-Zone Compound.

(11) The bulk specific gravity of empty 8-5/8" O.D. x 0.375" W.T. pipe with reference to salt water is:

$$\text{Specific Gravity} = \frac{81.43\#/\text{cu. ft.}}{64} = 1.272$$

(12) The anticipated specific gravity of the natural gas is 0.60.

(13) The design working pressure of the system is as follows:

(a) Maximum Allowable Operating Pressure based on fittings will be 1440 psi (maximum working pressure of ANSI 600# fittings).

(b) Maximum Allowable Operating Pressure based on line pipe will be:

MAOP = 2SFt/D
MAOP = 2 x 52,000 x 0.72 x 0.375/8.625
MAOP = 3256 psi

(c) Maximum Allowable Operating Pressure based on riser, underwater connection, and platform pipe will be:

MAOP = 2SFt/D
MAOP = 2 x 42,000 x 0.50 x 0.500/8.625
MAOP = 2435 psi

(14) The maximum working pressure will be 1440 psi based on the 600# flanges and valves.

UNUSUAL

(15) The anticipated operating pressures will range from 1100 psi to 1440 psi (High-Low Sensor Sets).

(16) The maximum capacity based on the maximum working pressure of 1440 psi will be 57 MMCF/D with expected volume of 23.5 MMCF/D based upon contract pressure of 1250 psig.

(17) The hydrostatic test pressure and hold time will be 2175 psi at 8 hours.

ANSI 600

(18) The designed burial depth will be as follows:

0+00 to 2+00 top of pipe 3 ft. below mud line
410+00 to 413+00 top of pipe 5 ft. below mud line

(19) The riser from -275' elevation to -22' elevation will have 1/2" of neoprene coating applied; from -22' elevation to +17' elevation 1" of neoprene coating will be applied and from +17' elevation to +47' elevation a 1/2" neoprene coating will be applied.

The riser piping above +47' elevation and platform piping will be coated with Amercoat's Dimetcote 6 Inorganic Zinc Silicote (primer), Amercoat 54 (intermediate coat) and Amercoat 99-R as a top coat.

The riser guard will be coated with Ameron-Tideguard 171 to a 3/16" thickness.

(20) The underwater side valve assembly will be coated with a Coal Tar Epoxy.

(21) All piping, fittings, equipment, etc., from the inlet flanges of the meter run manifold located on Kerr-McGee Corporation's "A" Platform and the 16" Tennessee Gas-Texas Eastern-Texas Gas side valve in Block 320, Eugene Island Area, (see schematic) complies with Part 192, Title 49, Code of Federal Regulations.

(22) Weld fittings will be equivalent to ASTM-A-106, Grade B, Seamless, with the exception that larger fittings will have yield strength of 42,000 psi as dictated by design.

(23) Flanges will be forged steel ASTM A-105-I.

(24) Flange bolts will be ASTM-A-193, Grade B-7, with hex nuts of matching strength, cadmium plated.

(25) Flexitallic gaskets will be used anywhere flat gaskets are required.

(26) Block valves will be Cameron or Rockwell ball valves (or equal).

(27) Check valves will be Wheatley (or equal).

(28) Construction Information:

(a) Starting Date - June 15, 1979
(b) Method of Construction - Lay barge or reel barge
(c) Method of Burial - Jet dredge barge and hand jet
(d) Time Required to Lay Pipe - 2 weeks
(e) Time Required to Complete Project - 4 weeks

Company contact:

Mr. Hoover L. Gibson, Chief Engineer
Texas Gas Transmission Corporation
Post Office Box 1160
Owensboro, Kentucky 42301

Telephone: Area Code 502/926-8686, Extension 4235

A certified copy of the articles of incorporation and a certificate of the Assistant Secretary, under seal, certifying that the Agent and Attorney-in-Fact executing the application had the authority to do so have already been submitted to your office. These documents have been placed on record in a file identified as New Orleans Miscellaneous File No. 032.

An originally signed copy of a Non-discrimination in Employment statement is enclosed, as well as the $10.00 filing fee, together with the first year's rental of $40.00, based on the ~~7.882~~ 7.82 miles of right of way.

per Telephone 4/19/79

An application for a permit is being filed with the District Engineer, U. S. Army Engineer District at New Orleans, Louisiana, simultaneously with the filing of this application.

Yours very truly,

TEXAS GAS TRANSMISSION CORPORATION

Richard C. Young
Agent and Attorney-in-Fact

Enclosure
Original Duplicate Letter - W/Enclosures

EXHIBIT A

Eugene Island Area, South Addition

Block 320	OCS-G-2609 Oil & Gas Lease 35%	Sun Oil Company (Delaware) c/o Mr. Myron R. Elliott P. O. Box 1501 Houston, Texas 77001
	21%	Cities Service Company c/o Mr. John V. Yard P. O. Box 22082 Houston, Texas 77027
	13%	Clark Oil Producing Company c/o Mr. J. W. Skelly 1000 Dresser Tower 601 Jefferson Houston, Texas 77002
	10.5%	Northern Michigan Exploration Company c/o Mr. J. B. Simpson P. O. Box 1150 Jackson, Michigan 49204
	10.5%	Texas Pacific Oil Company, Inc. c/o Mr. R. B. Freels 1700 One Main Place Dallas, Texas 75250
	10%	Diamond Shamrock Corporation c/o Mr. Harry M. Britt P. O. Box 631 Amarillo, Texas 79173
Block 320	OCS-G-1950-J Pipeline Right of Way	Texas Eastern Transmission Corporation c/o Mr. James G. Malven Rights of Way & Land Dept. P. O. Box 2521 Houston, Texas 77001 Tenneco, Inc. c/o Mr. R. G. Robertson P. O. Drawer 53388 OCS Lafayette, Louisiana 70505

Exhibit A (Cont'd)

Block 321	OCS-G-2610 Oil & Gas Lease	
	95%	Sun Oil Company (Delaware) c/o Mr. Myron R. Elliott P. O. Box 1501 Houston, Texas 77001
	5%	Diamond Shamrock Corporation c/o Mr. Harry M. Britt P. O. Box 631 Amarillo, Texas 79173
Blocks 323 & 324	OCS-G-3459 Pipeline Right of Way	Tarpon Transmission Company c/o Mr. Frank S. McGee, Jr. 4665 First International Bldg. Dallas, Texas 75270
Block 324	OCS-G-2611 Oil & Gas Lease	
	50%	Texaco, Inc. c/o Mr. Alton McClung P. O. Box 60252 New Orleans, Louisiana 70160
	50%	Tenneco Exploration, Ltd. c/o Mr. Steve Chesebro P. O. Box 51345 Lafayette, Louisiana 70505
Ship Shoal Area, South Addition Block 296	OCS-G-1535 Oil & Gas Lease	
	25%	Chevron U.S.A., Inc. c/o Mr. George E. Jones 1111 Tulane Avenue New Orleans, Louisiana 70112
	37.5%	Texas Gas Exploration Corporation c/o Mr. D. C. Blue, Jr. Land Department P. O. Box 52310 Houston, Texas 77052
	18.75%	Kerr-McGee Corporation c/o Mr. Don H. Edgington P. O. Box 25861 (T-2506) Oklahoma City, Oklahoma 73125
	25%	Samedan Oil Corporation c/o Mr. Ben Moore 1260 Oil & Gas Building New Orleans, Louisiana 70112

NOTE: This form must be executed as an original.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

NONDISCRIMINATION IN EMPLOYMENT

As a condition precedent to the approval of the granting of the subject pipeline right-of-way, the grantee Texas Gas Transmission Corporation hereby agrees and consents to the following stipulation which is to be incorporated into the application for said right-of-way.

During the performance of this contract the grantee agrees as follows:

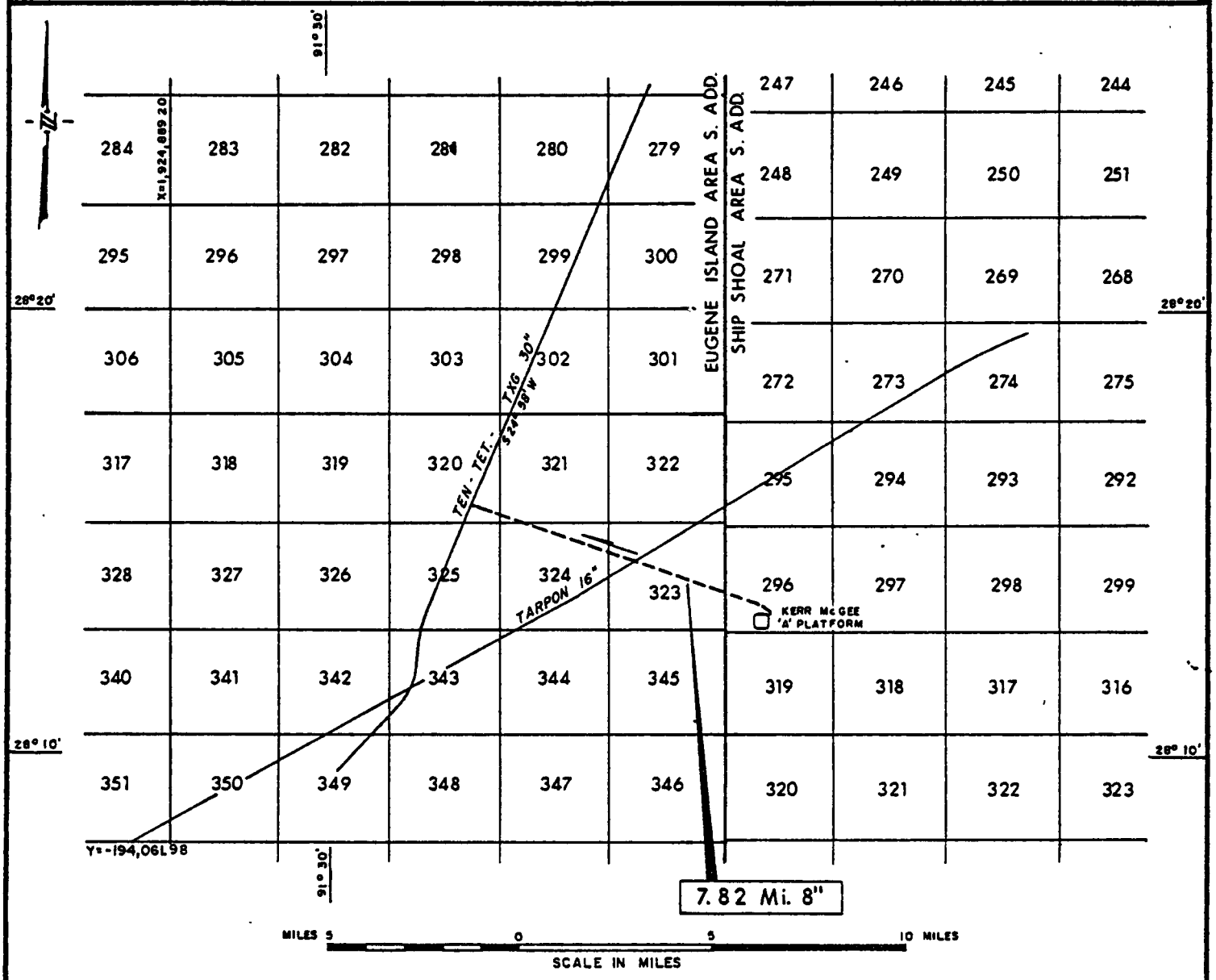
> During performance under this grant, the grantee shall fully comply with paragraphs (1) through (7) of section 202 of Executive Order 11246 as revised (reprinted in 41 CFR 60-1.4(a)), which are for the purpose of preventing discrimination against persons on the basis of the race, color, religion, sex or national origin. Paragraphs (1) through (7) of section 202 of Executive Order 11246 as amended are incorporated in this grant by reference.

Texas Gas Transmission Corporation

Richard C. Young, AGENT AND ATTORNEY-IN-FACT
Signature of Grantee

Date: March 27, 1979

BEST AVAILABLE COPY



OCS-G 4027

NOTE-
ALL TEXAS GAS PIPING TO MEET OR EXCEED PART 192, TITLE 49, CODE OF FEDERAL REGULATIONS.

Douglas L. Jolly
Douglas L. Jolly KY - 2843

TEXAS GAS TRANSMISSION CORP.
OWENSBORO, KENTUCKY

BLOCK 296-A SHIP SHOAL
BLOCK 320 EUGENE ISLAND 8" LINE
INDEX MAP

SHIP SHOAL & EUGENE ISLAND AREAS
OFFSHORE LOUISIANA

SCALE NOTED	DATE 3-23-79
DRAWN J. N.	APPROVED
TRACED	APPROVED
CHECKED D. L. J.	
FILE NO.	ENGR. DEPT.

NO.	DATE	DESCRIPTION	BY	CHK'D	APP'D
0	3-23-79	Proposed Location	J.N.	D.L.J	

REVISIONS

DWG. NO. RS - 213

cy drafting

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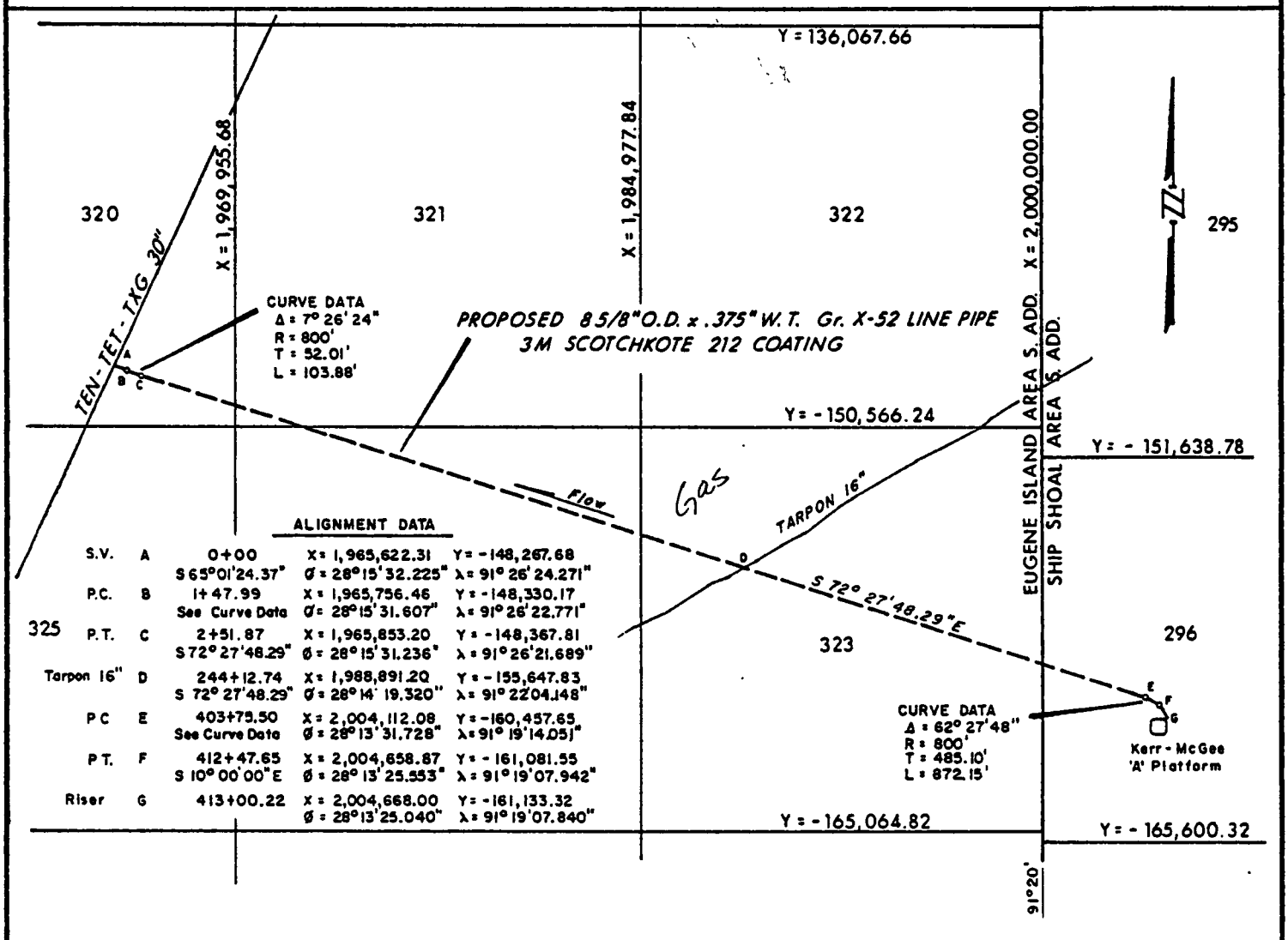


ALIGNMENT DATA

S.V.	A	0+00 S 65°01'24.37"	X = 1,965,622.31 Ø = 28°15'32.225"	Y = -148,267.68 λ = 91° 26' 24.271"
P.C.	B	1+47.99 See Curve Data	X = 1,965,756.46 Ø = 28°15'31.607"	Y = -148,330.17 λ = 91° 26' 22.771"
P.T.	C	2+51.87 S 72° 27' 48.29"	X = 1,965,853.20 Ø = 28°15'31.236"	Y = -148,367.81 λ = 91° 26' 21.689"
Tarpon 16"	D	244+12.74 S 72° 27' 48.29"	X = 1,988,891.20 Ø = 28°14' 19.320"	Y = -155,647.83 λ = 91° 22' 04.148"
P.C.	E	403+75.50 See Curve Data	X = 2,004,112.08 Ø = 28°13' 31.728"	Y = -160,457.65 λ = 91° 19' 14.051"
P.T.	F	412+47.65 S 10° 00' 00" E	X = 2,004,658.87 Ø = 28°13' 25.553"	Y = -161,081.55 λ = 91° 19' 07.942"
Riser	G	413+00.22	X = 2,004,668.00 Ø = 28°13' 25.040"	Y = -161,133.32 λ = 91° 19' 07.840"

NOTE -
ALL TEXAS GAS PIPING TO MEET OR EXCEED PART 192, TITLE 49, CODE OF FEDERAL REGULATIONS.

NOTE:
This pipeline to be used to transport natural gas from Louisiana to the market. All bearings are Lambert. Width of Right-of Way 200' Length of Line 41,300.22' = 7.82 Mi.

SEE RS-215 FOR PROFILE OCS-G 4027

LOCATION OF RIGHT-OF-WAY
HAS BEEN ACCURATELY
DELINEATED UPON THIS MAP
Douglas L. Jolly
Douglas L. Jolly KY-2843

TEXAS GAS TRANSMISSION CORP.
OWENSBORO, KENTUCKY

BLOCK 296-A SHIP SHOAL
BLOCK 320 EUGENE ISLAND 8" LINE
NATURAL GAS PIPELINE &
RIGHT-OF-WAY
SHIP SHOAL & EUGENE ISLAND AREAS
OFFSHORE LOUISIANA

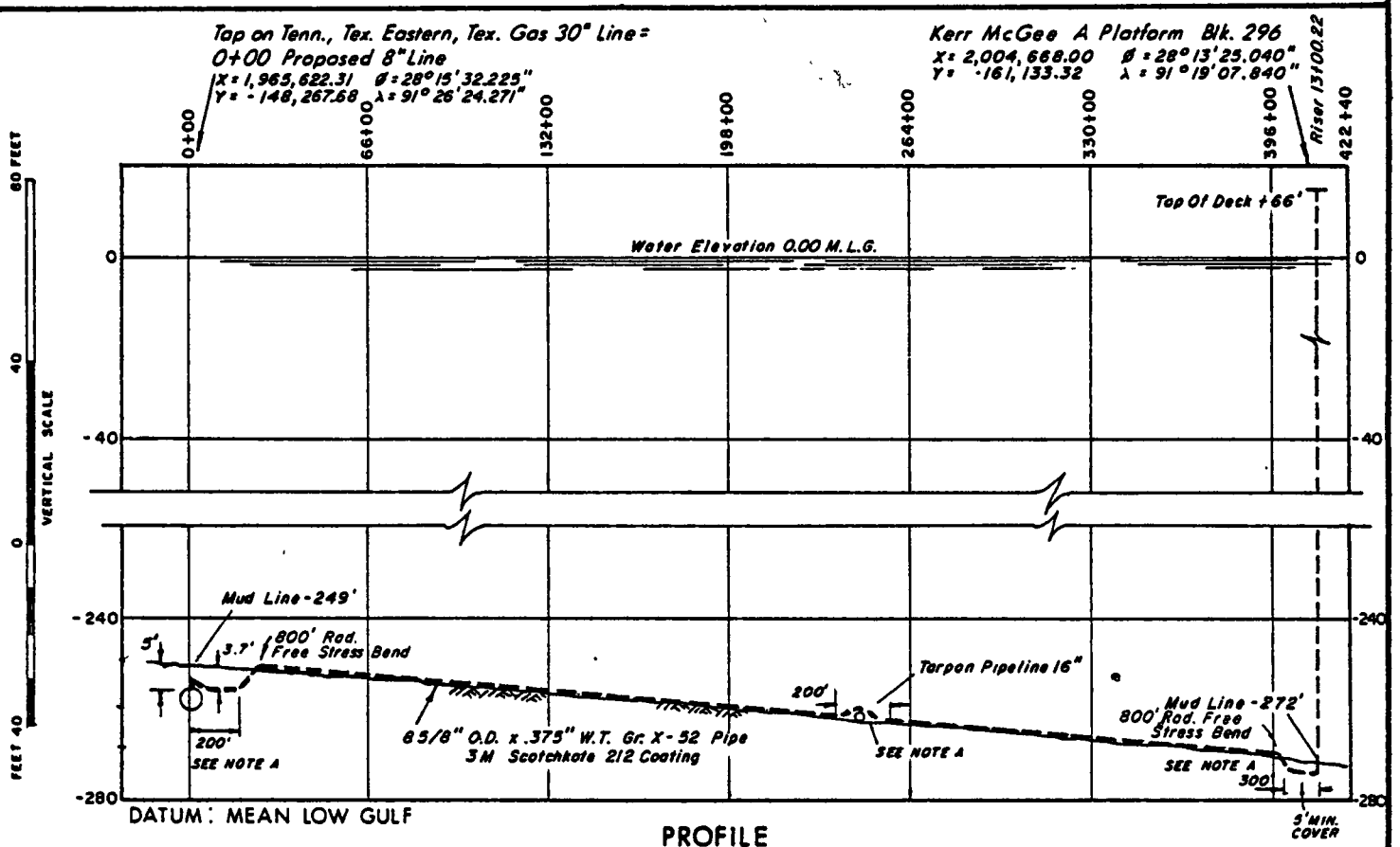
SCALE AS SHOWN	DATE 3-23-79
DRAWN J.N	APPROVED
TRACED	APPROVED
CHECKED D.L.J.	
FILE NO.	ENGR. DEPT.

DWG. NO. RS-214

NO.	DATE	DESCRIPTION	BY	CHK'D	APP'D
0	3-23-79	Proposed Location	J.N.	D.L.J.	

REVISIONS

BEST AVAILABLE COPY

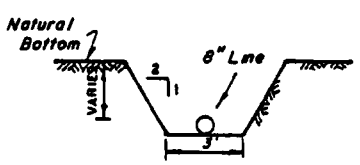


PROFILE

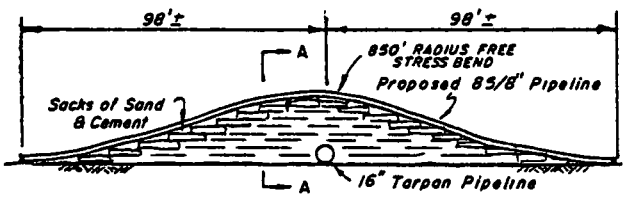
FEET 6000 0 6000 12000 FEET

SCALE IN FEET

Excavation By Jetting
TOTAL EXCAVATION 1,600 CU. YDS.

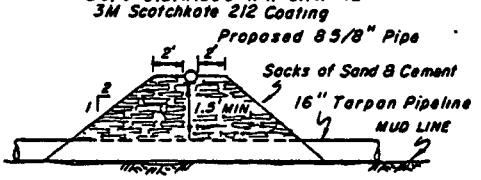


TYPICAL DITCH SECTION
NO SCALE



TARPON CROSSING
NO SCALE

NOTE A
8 5/8" O.D. x .500" W.T. Gr. X-42
3M Scotchkote 212 Coating



TARPON CROSSING
SECTION A-A
NO SCALE

SEE RS-214 FOR PLAN

OCS-G 4027

NOTE:
ALL TEXAS GAS PIPING TO MEET OR EXCEED PART 192, TITLE 49, CODE OF FEDERAL REGULATIONS.

I HEREBY CERTIFY THAT THIS INFORMATION IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF

Douglas L. Jolly

Douglas L Jolly KY - 2843

TEXAS GAS TRANSMISSION CORP.
OWENSBORO, KENTUCKY

BLOCK 296-A SHIP SHOAL
BLOCK 320 EUGENE ISLAND 8" LINE
NATURAL GAS PIPELINE
PROFILE
SHIP SHOAL & EUGENE ISLAND AREAS
OFFSHORE LOUISIANA

SCALE AS SHOWN	DATE 3-23-79
DRAWN J. N.	APPROVED D.L.J.
TRACED	APPROVED
CHECKED D. L. J.	
FILE NO.	ENGR. DEPT.

NO.	DATE	DESCRIPTION	BY	CHK'D	APP'D
0	3-23-79	Proposed Location	J.N.	D.L.J.	D.L.J.

REVISIONS

DWG. NO. RS-215

BEST AVAILABLE COPY

EXISTING TENN. - TEX. EASTERN - TEX GAS -30" PIPELINE
SHIP SHOAL - EUGENE ISLAND BLK. 349 LINE

MAOP = 1200 PSIG
OCS-G 1959 J

NOT SO -
MAOP = 1440
confirmed
WITH A. Britton
4-17-79
DJP

G2322

16" 900# ANSI FLANGE
8" 900" ANSI BLOCK VALVE W/
2-2" ANSI 900# BY-PASS VALVES
8" ANSI 900" CHECK VALVE

200' 8 5/8"O.D. x .500" W.T. GR. X-42

2 SETS 8" 900# ANSI FLANGES

200' 8 5/8"O.D. x .500" W.T., GR. X-42
AT FOREIGN LINE CROSSING

40,600' 8 5/8" O.D. x .375" W.T, GR X-52

16" TARPON PIPELINE

UNDERWATER PIPELINE

(1) 42 Sacrificial zinc anodes each weighing 280 lbs. and spaced every 1000 feet.

(2) 3-M Scotchkote 212 Coating

300' 8 5/8"O.D. x .500"W.T., GR. X-42

2" 600# ANSI BLOCK VALVE
2" 600# ANSI CHECK VALVE

4" 600# ANSI BLOCK VALVE

8" 600# ANSI INSULATING FLANGE

2 8" 600# ANSI BLOCK VALVES W/
1- 8" 600# ANSI FLANGE

4" 600# ANSI BLOW-DOWN VALVE

8" 600# ANSI CHECK VALVE

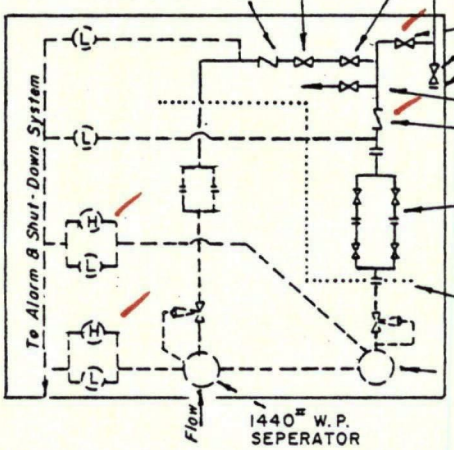
2 - 4" SERIES 600 METER RUNS W/
4 - 4" 600# ANSI BLOCK VALVES

DIVISION OF OWNERSHIP

PRODUCERS EQUIPMENT
CONTACTOR 1440# WORKING PRESSURE

ALL OF PRODUCERS HIGH PRESSURE FACILITIES DESIGNED FOR 1440# WORKING PRESSURE.

OCS-G 4027



KERR-McGEE CORP.
SHIP SHOAL AREA
BLOCK 296-A PLATFORM

S 2025

NOTE:
ALL TEXAS GAS PIPING SYSTEM TO MEET OR EXCEED PART 192, TITLE 49, CODE OF FEDERAL REGULATIONS.

I HEREBY CERTIFY THAT THIS INFORMATION IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Hoover L. Gibson KY - 3681

TEXAS GAS TRANSMISSION CORP.
OWENSBORO, KENTUCKY

BLOCK 296-A SHIP SHOAL
BLOCK 320 EUGENE ISLAND 8" LINE
SCHEMATIC

SHIP SHOAL & EUGENE ISLAND AREAS
OFFSHORE LOUISIANA

SCALE NONE	DATE 3-23-79
DRAWN J. N.	APPROVED
TRACED	APPROVED
CHECKED H. L. G.	
FILE NO.	ENGR. DEPT.

DWG. NO. RS - 216

REVISIONS

NO.	DATE	DESCRIPTION	BY	CHK'D	APP'D
0	3-23-79	Proposed Location	J.N.	H.L.G.	

41 300 (7.82 7pi) KMc's "A" S. 96 4027
TGT-TGT 30"PL 55349

PIPELINE APPLICATION CHECK LIST

INSTRUCTIONS: Check the blank on the left if the statement is affirmative or correct data submitted. Mark N/A (not applicable) where appropriate. Place an X in the blank if the answer is no or if the data was not submitted. All blanks marked X must be rectified to a check (or qualified) before approval can be given for the pipeline. Enter data in the blanks on the right.

A. Verify the following general information:

I. SOP

__/__ a. Do the leases involved on the P/L application appear on the current Suspension of Production (SOP) Lease List?

II. POD

__/__ a. Is the pipeline presently covered by an approved Plan of Development (POD)? (Discuss ROU&E with Doug.) If yes, go to III. If No, go to 250.34. (Requires submittal to POD/P by operator to District.)

III. USGS Application

_____ a. The applicant is a Federal lease holder and the pipeline is to be used for such purposes as:

_____ 1. Moving production to a control point for gathering, treating, storing, or measuring.

_____ 2. Delivery of production to a point of sale.

_____ 3. Delivery of production to a pipeline operated by a transportation company.

_____ 4. Moving fluids in connection with lease operations, such as for injunction purposes.

_____ b. The pipeline is within the lease boundary owned by the operator (If yes, include 30 CFR 250.19(b) in approval.)

_____ c. Pipeline is within continguous lease boundaries. (If yes, include 30 CFR 250.19(b) in approval.)

_____ d. Pipeline is within non-continguous lease boundaries. (If yes, include 30 CFR 250.18(c) and 30 CFR 250.19(b) in approval.)

_____ e. Lessee's "intent to cross" letter are received. (Wait 30 days for letters of objection. Only objections concerning interference with lease operations will be considered.)

_____ f. Pursuant to Secretarial Order 2974 of April 30, 1975, check the following:

_____1. FWS notified _____.

_____2. FWS comment received _____.

_____3. BLM notified _____.

_____4. BLM comment received _____.

_____5. Environmental Impact Evaluations completed _____.

_____6. If related to new POD/P, date of POD/P approval _____.

IV. BLM Application

✓ ✓ a. The pipeline must be able to be subjected to common carrier provisions (i.e., no downstream production facilities or downstream pipelines which could not be subjected to common carrier provisions).

V. DOT Pipelines

✓ ✓ a. The pipelines are shoreward of the outlet flange at the first process facility (If yes, include 49 CFR 192 for gas P/L or 49 CFR 195 for oil P/L in approval).

VI. DOI Pipelines

NA a. Pipelines not covered by V above.

B. Verify that the information shown on the safety equipment schematic drawing contains the following:

✓ ✓ I. The pipeline leaving the platform receiving production from the platform is equipped with high and low pressure sensors located upstream of departing check valves to directly or indirectly shut-in the well or wells on the platform.

NA II. The pipeline delivering production to production facilities on the platform is equipped with an automatic fail close valve tied into the automatic and remote shut-in system.

NA III. The pipeline crossing the platform which does not deliver production to the platform, but which may or may not receive production from the platform, is equipped with high and low pressure sensors connected to an automatic fail close valve located in the upstream portion of the pipeline at the platform. In addition, the sensors are tied into either the platform's automatic and remote shut-in system or an independent remote shut-in system.

✓ NA IV. The pipeline boarding the platform is equipped with a check valve. SSTI

✓ ✓ V. The pipeline leaving the platform is equipped with a check valve.

NA VI. The pipeline pump is shown as well as its associated high and low pressure shut-in device.

✓ ✓ VII. If pipeline pilots are located on any process vessel, all flow restrictions (backpressure valves, chokes) downstream of pilots are indicated on the schematic.

✓ ✓ VIII. Pressure source is drawn into the schematic with the following:

✓ ✓ a. Source CONTACTOR / SEPARATOR

✓ ✓ b. Maximum source pressure, psig 1440.

✓ IX. The rated working pressures of all separators, pumps, compressors, valves, ✓ flanges, and fittings upstream of and including the boarding automatic fail close valve are shown. ANSI 600

C. Verify that the location plat depicts the following:

✓ ✓ I. Location of P/L

✓ ✓ II. Length of P/L 41,300

✓ ✓ III. Size of P/L 8.625

✓ ✓ IV. Type of service

✓ ✓ V. Direction of flow

D. Verify that the information given on the submitted data sheet is complete; and calculate the $MAOP_{sc}$, $MAOP_{rc}$, $MAOP_{p/l}$.

I. General information for calculating $MAOP_{sc}$, $MAOP_{rc}$, etc.

✓	a. Size of P/L, inches	8.625	8.625
✓	b. Weight of P/L, lbs./ft.	33.04	43.39
✓	c. Grade of P/L	X-52	X-42
✓	d. Wall thickness, inches	.375	.5
✓	e. Size of riser, inches	8.625	
✓	f. Weight of riser, lbs./ft.	43.39	
✓	g. Grade of riser	X-42	
✓	h. Wall thickness of riser, inches	.5	
✓	i. Minimum WP rating of piping, fittings, valves, psig	1,440	
	j. Hydrostatic test pressure (HTP), psig	✓ 2175	
	k. Hold time, hrs.	✓ 8	
✓	l. Classification of P/L ([redacted] gas)	GAS	

III. DOT Pipelines

a. IP @ SMYS for submerged pipeline = $\frac{2st}{D}$ = $\frac{2(52{,}000).375}{8.625}$ = 4522

b. (.72 x IP @ SMYS) for submerged pipeline = 3256 ($MAOP_{sc}$)

c. IP @ SMYS for riser = $\frac{2st}{D}$ = $\frac{2(42{,}000).5}{8.625}$ = 4870

d. ~~For oil P/L (.60 x IP @ SMYS) for riser = ($MAOP_{rc}$)~~

For gas P/L (.50 x IP @ SMYS) for riser = 2435

e. See Ii above 1440 ($MAOP_{pfv}$)

f. Are b, d, and e $\geq$ MSP

1440 $\geq$ 1440

NOTE: If not, a departure is necessary requiring redundant safety equipment.

NA A written request for a departure has been received and the redundant safety equipment is satisfactory.

g. Limit of Testing

NA 1. For oil P/L:

Is 1.25 MSP $\leq$ HTP $\leq$ .95 (IP @ SMYS for smaller IP of a and c above)

____ $\leq$ ____ $\leq$ ____

2. For gas P/L riser component:

Is 1.50 MSP $\leq$ HTP of riser $\leq$ .95 (IP @ SMYS of c above)

2160 $\leq$ 2175 $\leq$ 4627

3. For gas P/L submerged component:

Is 1.25 MSP $\leq$ HTP of submerged component $\leq$ .95 (IP @ SMYS of a above)

1800 $\leq$ 2175 $\leq$ 4296

NOTE: If not, inquire of the operator as to what he considers a limit of testing as a percentage of IP @ SMYS.

NA Operator's answer ____ % of IP @ SMYS (for smaller IP)

IV. Pipeline Receiving Production (Installed Prior to July 31, 1977)

		Submerged Component	Riser
a.	Size, inches	30"	
b.	Grade		
c.	Wall thickness, inches		
d.	Minimum working pressure of valves and flanges	(MAOPpfv)	
e.	Date of last hydrostatic test		
f.	HTP, psig		
g.	Hold time, hours		
h.	MAOP based on HTP HTP/1.25		
i.	IP@SMYS for submerged P/L 8ST/D		
j.	(.72 X IP@SMYS) for submerged P/L	(MAOPsc)	
k.	IP@SMYS for riser 2ST/D		
l.	(.60 X IP@SMYS) for riser	(MAOPrc)	

m. If the receiving P/L is a DOT gas P/L and has not been tested since July 1, 1971, then what is the HAOP to which the segment was subjected during the 5 years prior to July 1, 1976?

n. MAOP of receiving P/L _ MAOP of proposed P/L _ MAOP of proposed P/L

G 1950-J
Approved 3-25-74
Constructed 09-22-78
Assigned MAOP
1,440 psig.

h. $MAOP_{p/1}$ based on HTP

1. For oil P/L HTP/1.25 = 2175

2. For gas P/L riser component HTP/1.5 of riser = 1450

3. For gas P/L submerged component 2175 HTP/1.25 of submerged component = 1740

~~i. For oil P/L Is HTP hold time ≥ 24 hours~~

For gas P/L Is HTP hold time ≥ 8 hours

j. $MAOP_{p/1}$ = the smallest of b, d, e, and h above

1440 ($MAOP_{p/1}$)

k. Test pressure ANSI & API carbon steel RTJ & RF flanges and valves

2175 (From table 3.1 page 31 API RP 14E)

l. Is k ≥ HTP

NOTE: If not, add statement in approval letter to insure valves and flanges are not subjected to test pressure.

E. Verify that the information given on the submitted data sheet is complete; and calculate the life expectancy of the pipelines corrosion protection ($LE_{p/l}$)

I. General Information for Calculating $LE_{p/l}$

✓ a. Type of corrosion protection (platform anodes, P/L anodes, or rectifiers)

NA b. If platform anodes are used:

1. Type of anode —

2. Weight of unit anode, lbs. —

✓ c. If pipeline anodes are used:

✓ 1. Type of anode ZN

✓ 2. Spacing interval, ft. 1000

✓ 3. Weight of unit anode, lbs. 280

II. Calculated Life Expectancy of Corrosion Protection

NA a. If platform anodes are used, are they considered adequate —

✓ b. If pipeline anodes are used:

$LE_{p/l} = 3.82 \times 10^4 \times W^o/DIR?$ = 48.5

W^o = weight of one anode, pounds = 280

D = outside diameter of pipe, inches 8.625

I = interval = length of pipe, feet ÷ total number of anodes $\frac{41,300}{42} = 983$ ✓

R = consumption rate, lbs./amp-yr. 26

✓ ✓ c. Is our calculated $LE_{p/l} \geq 20$ years

F. Verify that the information given on the submitted data sheet is complete; and calculate the specific gravity of the pipeline ($SP_{p/1}$)

I. General Information pertaining to $SG_{p/1}$

a. Description of pipelines protective coating 12 M.11 SCOTCHCOTE 212

b. Description of risers protective coating —

c. Description of pre-concrete coating NA

d. Density of concrete, lbs./cu. ft. NA

e. Thickness of concrete, inches NA

f. Thickness of asphalt/somastic NA

g. Gravity or density of products .6

For gas .6 (air = 1.0)

For oil/condensate — ° API, — (water = 1.0)

h. Given $SG_{p/1}$ 1.272

II. $SG_{p/l}$

✓ a. Expoxy-coated pipelines:

$SG_{p/l} = 2.865\ W/D^2$ $\frac{33.04}{8.625^2} = 1.272$

W = weight of bare pipe, lbs./ft.

D = diameter of pipe, inches

NA b. For weighted pipelines:

$$SG_{p/l} = \frac{d_c}{d} + \frac{k_2}{(T-k_1)^2}\left(\frac{W+P}{k_3} - \frac{d_c}{d}\right)$$

d_c = density of concrete, lbs./ft.^{3}

d = density of fluid in which pipeline is submerged, lbs./ft.^{3}

k_1, k_2, k_3 = coefficients from tables

T = thickness of concrete coating, inches

W = weight of bare pipe, lbs./ft.

P = weight of double enamel coat and felt wrap, or weight of asphaltmastic coating, lbs./ft.

$SG_{p/l}$ = 1.272

✓ c. Is our calculated SG ≅ operator's given SG

1.272 ≅ 1.272 ✓

NOTE: These values should be approximately the same. If not, resolve. If the SG is close to a value of 1, the pipeline is unacceptable and must be weighted with concrete or anchored securely to the bottom.

G. Verify the following general information:

✓ I. Water Depth, ft. -275' (Max) -250' (Min)

✓ II. Burial depth, ft. -0- WATER DEPTH > 200', BURIAL ONLY AT PLAT. 5' TAP.

✓ III. Maximum Operating Pressure (MOP) 1,440

✓ IV. Capacity 57 M^{2}CFD at
23.5 M^{2}CF/D 1250